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OCTOBER 30, 1936. VOL. XXIII, NO. 588.

WORLD -RADIO

short-wave number

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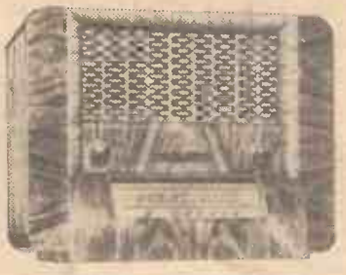

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WORLD-RADIO

VOL. XXIII NO. 588

OCTOBER 30, 1936

All Saints' and All Souls' Days

MANY Continental stations are announcing broadcasts of a solemn nature for Sunday and Monday next, All Saints' and All Souls' Day respectively. I observe that on Sunday Verdi's *Requiem* will be heard from Budapest as well as from Prague, and that Mozart's *Requiem* is to be transmitted from Vienna on Monday. One of the most interesting broadcasts in this connexion is that announced from Radio-Paris for 8.45 p.m. on Sunday—a French version of Jerome K. Jerome's *The Passing of the Third Floor Back*. Several studio opera performances announced in the Sunday programmes will, I have no doubt, attract many listeners. Gounod's *Faust*, Mozart's *Don Giovanni*, and Zandonai's *Conchita* will be heard from Sottens, Stuttgart, and Rome respectively. The last, by the way, will be conducted by the composer. I should like to draw listeners' attention to one other series of broadcasts emanating from Vienna. On Monday, Wednesday, and Friday that station is to broadcast recitals of recently-discovered Hugo Wolf songs. Finally, the genial German composer of light music, Paul Lincke, celebrates his seventieth birthday on Saturday next. In honour of the occasion a programme of his music will be transmitted at 7.10 p.m. from the Deutschlandsender studio.

How Many Sets Has Russia?

Russia, I hear, wants to know the exact number of her broadcasting listeners. Proceedings to that end are being taken by the authorities, who are numbering the receiving sets actually in use all over the territory. The census was started in Moscow recently, and is being continued from province to province. It is hoped that the numerous clandestine receivers known to be scattered all over the country will at last be rounded up.

"Proceedings . . . by the authorities"

U.S.A. Presidential Election

Listeners in this country should have an excellent opportunity of comparing short-wave with medium-wave reception of America on the night of Tuesday, November 3. The greater part of the American nation—and most of the world besides—will be listening to the Presidential Election broadcasts. The major networks will muster their entire facilities to give the public the news—both on the medium and short waves—as fast as the news agencies can gather the returns. The three big Press associations joined forces, a few years ago, to form the "Press-Radio Bureau," which pools their reports, correlates and edits them, and concentrates them into a report specially for microphone use. Broadcasting finances the Bureau, and receives periodic news summaries as well as immediate reports of news of outstanding importance. This year the Bureau will "feed" the election returns by means of special wires direct to the headquarters of both the major broadcasting networks.

An All-Night Hearing?

Each of the broadcasting organisations is making elaborate arrangements for covering the election with commentaries and announcements. The NBC tentative plans include a transmission at 8 a.m. on Election Day direct from the village of New Ashford, Mass.—traditionally the first town to complete its count of votes. Messrs. Graham McNamee and John B. Kennedy will be the announcers. Throughout the evening there will be entertainment programmes, which will be interrupted as election results and news come in. The CBS has a rather similar scheme, with Messrs. Robert Trout, Westbrook van Voorjies (known to American listeners as "the Voice of Time"), and H. V. Kaltenborn at the microphones. Both organisations, I am informed, will have microphones and announcers at the national headquarters of the Republican and the Democratic parties in Chicago and New York, as well as at the homes of the candidates in Hyde Park and Topeka. They hope to get the party chairman and other political notabilities—and possibly even the presidential candidates themselves—to speak to the vast audience. Both networks will have outside-broadcast vans. It appears more than likely that the important networks will be "on the air" long after the usual midnight or 1 a.m. closing-down time (6 a.m. G.M.T. Wednesday) in order to be able to give listeners definite news of the winning candidate.

King Christian's Silver Jubilee

It looks as if the middle of May next year will see some really festal broadcasts. In addition to the special events and public rejoicing in connexion with the Coronation, which will undoubtedly be reflected in our own home and Empire services, and the foreign repercussions of them which will, we trust, follow, Denmark is to have a special celebration. King Christian acceded to the throne of Denmark on May 14, 1912, and will, therefore, celebrate his Silver Jubilee in May next year. Arrangements are, I understand, already being made for a world-wide broadcast in connexion with that happy event.

Kaiserslautern's New Wavelength

The former Bavarian relay station, Kaiserslautern, which was synchronised with Frankfurt after the new régime had taken over in Germany, has, I am told, altered its wavelength from the present 251 m. to 209.9 m., and will in future relay the Saarbrücken programme. The wavelength alteration took place in the night of October 25-26. Kaiserslautern's new wavelength is an international common wave.

Big Distances on Ultra-Short Waves

A French amateur, I read, succeeded recently in accomplishing a remarkable performance in the short-wave line. With his ultra-short-wave transmitter, operating on a wavelength of 5 metres, he managed to get into touch with a friend in Corsica, thus establishing a radio-link at a distance of about 140 miles. This performance, remarkable as it is, has, however, been put completely in the shade by the experience of a Johannesburg amateur who, according to the *Morning Post*, has been regularly picking up the ultra-short-wave television sound transmissions from the Alexandra Palace, as well as the vision sounds. The latter would seem to imply a reception of the pictures if he had had a television receiver. Freak reception, no doubt—but very interesting.

Australian Programme Controller

Dr. Keith Barry, whose appointment to the position of Federal Programme Controller was recently announced by the Australian Broadcasting Commission, contributed articles to WORLD-RADIO on music, both while he was in this country two years ago and after his return to Australia. He was formerly Musical Editor of the Australian *Wireless Weekly*. For some months he has acted in an advisory capacity to the Commission in relation to programmes. His new office will entail responsibility for the general co-ordination of all programmes and programme departments, both Federal and State.

The Cow and the Loudspeaker

IT is a very old legend that broadcast music increases cows' milk yield; yet I see that it has been revived—with appropriate trimmings. A Moravian newspaper—which, significantly enough, has since failed—recently printed an article by an agriculturist who maintains that cows are particularly sensitive to music and that the strains of the heavenly muse have a distinct influence on the bovine milk glands, which might be stimulated to the extent of 25 per cent. above the normal, according to the degree of "brightness" of music tuned in. Not only that: the quality of the fluid is affected by the type of music. Thus, if dance tunes were replaced by symphony concerts, the quality of milk might reach almost Grade A standard, I gather. But surely jazz music would be more likely to produce butter.

ETHERVIATOR

The French Postmaster-General's Plans

(From our Paris Correspondent)

On Tuesday, October 20, M. Robert Jardillier, Minister of P.T.T., invited representatives of the Paris Press to a meeting and gave them a full account of his broadcasting plans. The following are some of the points dealt with by him.

Short Waves

The Noyant site for the new Colonial short-wave station has been definitely abandoned. The station to replace Vincennes will be situated near Paris on the site of the present Radio-Paris transmitter at Essarts-le-Roi and will possess two 100-kW transmitters. This decision will result in an economy of Frs.10,000,000; and its nearness to Paris, the chief supplier of programmes, will facilitate programme compilation. It is hoped to inaugurate this station towards the end of 1937.

Television

In order to discover and adopt the best system of television several constructors will be given the opportunity of making use of their systems at the Eiffel Tower in conjunction with an ultra-short-wave transmitter. This arrangement should be in full force in time for the 1937 Paris Exhibition, where television demonstrations will be a feature.

Public Loudspeakers

One hundred public loudspeakers have already been installed in forty different towns in France to broadcast programme items of national interest and artistic programmes of special merit. The number of these public loudspeakers will be greatly increased.

Paris International Exhibition, 1937

As it was considered to be too late to construct a "Broadcasting House" in the grounds of the Paris 1937 Exhibition, and since also a suitable site could not be found there, this plan has been abandoned. The P.T.T. services will therefore build a "Radio Palace" for the Exhibition, from which transmissions will be made. It will include a large studio of 7,000 cubic metres, one of 2,000 cubic metres, and three or four smaller studios for spoken broadcasts. The permanent "Broadcasting House" will in the meantime be the subject of study both in France and abroad, and engineers will go to America for that purpose. The beginning of 1938 should see the broadcasting house completed. Similar broadcasting centres on a smaller scale will be built in some provincial towns.

Specialisation of Stations

The State stations will be divided into five groups, each group giving an entirely distinctive programme, and the stations will be arranged in such a way that any listener in France will be able to hear clearly from at least one station from each group. There will no longer be programmes broadcast by all stations simultaneously, and alternative programmes will thus become an actual fact. Up-to-date transmitting vans will be provided for Paris and provincial stations with short-wave and ultra-short-wave liaison with the transmitting station, and disc recording machines.

Courses for Schools

Three groups of programmes for scholars —primary, secondary, and advanced—will be begun in December and January next. The third will consist of the broadcasting from the Collège de France and similar institutions of lectures suitable for university undergraduates or students for the professions.

Winter Series of Programmes

The Minister intends to develop international exchange of programmes and to use the microphone still more for the propaganda of French culture abroad. An agreement has been reached with six Parisian symphonic associations, and arrangements are being made with provincial associations also. There will be one broadcast a week from the Opéra, from the Comédie Française, and from the Odéon, with two from the Opéra-Comique. Negotiations are also taking place with private theatres. Advantage is being taken of the opportunity afforded by the repairs now being effected at the Opéra House, on account of the recent fire, to instal twelve microphones at the most suitable points.

Progress of New Stations

The new Poste National will be completed towards the end of 1937 and should be heard clearly all over Europe. Building will be begun on the site between Bourges and Vierzon in a few weeks' time, and the directional aerials will be erected early in the new year. Grenoble will be given a power of 100 kW with possibilities of extension to 200 kW if needed. Relay stations will be provided in regions that do not appear to be sufficiently well served, and the first ones will be erected at Perpignan, Rouen, Brest, and Dijon.

M. Jardillier

Studios

Improvements are being made in the studio accommodation at all stations. New studios have been completed at Nice; those of Marseilles and Dijon are nearly ready. But whenever possible, a broadcasting house is to be erected. Those of Bordeaux and Lyons are completed; Toulouse has bought a building and a site; and the Lille "house" has been in use for some months.

General

Improvements are being made to the official checking stations. The listening control will be completed by a station for tracing private unauthorised transmissions and by a centre of control of transmissions (similar to that at Brussels).

Old cables will be replaced by new ones, and other improvements will be made to all services.

Listeners at the end of September had passed the three million mark by some thirty thousand.

(Continued from column 3)

with electrical energy. In the larger towns, such as Singapore, Penang, Kuala Lumpur, and Ipoh, a choice can be had between either type of supply.

In the tin mines and rubber plantations of the country, where large numbers of Europeans are employed, the sets used are of necessity battery-operated types.

E. C. J.

A Soap-Box Derby in U.S.A.

(From our New York Correspondent)

With its entrants hurtling down a 10-degree straight-away hillside, a soap-box Derby, in which boys from all over the country drove their home-made vehicles, recently provided American listeners with a series of interesting broadcasts.

Begun several seasons ago, the event has gradually assumed, in the American fashion, large proportions: grandstands are provided for the multitudes which gather to watch the final race. This year parking space was provided near the Akron, Ohio, airport (the scene of the event) for 50,000 motor-cars.

Half-a-dozen substantial prizes, put up by an automobile company and by 116 newspapers which sponsor the preliminaries in various cities, stimulate the young contestants to heroic efforts. Like the professional drivers whom they emulate they take risks. Nor can a soap-box race meeting be run without risk to the thousands who like to get as close as possible. In last year's race Mr. Graham McNamee, NBC sports announcer, was among several "innocent bystanders" carried away to hospital when a vicious four-wheeled entry ran amuck. One cause of mishaps—in addition to the call for speed—is the flimsy construction of some of the vehicles. Lack of funds means improvisations, and even the relatively wealthy entrants are limited by the regulations to a construction cost of ten dollars.

Two special broadcasts were conducted at Akron, by the NBC, on a coast-to-coast hook-up, while in the earlier contest, in San Francisco, an NBC announcer followed the field in an "official car" of soap-box proportions, and sent out, by means of a short-wave pack transmitter hung about his neck, a close-up description of the dust-raising midgets.

Broadcasting in F.M.S.

The question of providing a Government broadcasting service for the inhabitants of the Federated Malay States and the Straits Settlements was recently raised in the meetings of the F.M.S. Legislature, when the Government replied that it was awaiting the report of a committee set up by the Secretary of State for Colonies to go into the question of broadcasting in the British Empire before deciding its policy on broadcasting matters.

At a Council meeting held in August at Kuala Lumpur, the capital city of the Federated Malay States, the Malayan Government decided to abolish entirely the import duty on British-made wireless receiving sets and components and to reduce that on foreign makes from 20 per cent. to 10 per cent. *ad valorem*.

There is a boom in the trade of wireless goods in Malaya at the present time and the number of broadcast receiving licences throughout the country is increasing at a rapid rate. From a couple of hundred set-owners of a few years ago the figure has now exceeded the 4,000 mark and is still rising. It is anticipated that the 5,000 mark will be reached before the end of the year.

The number of wireless dealers has also increased to a great extent, from a handful three or four years ago to over two hundred and fifty at the present moment.

Quite a large number of British products are now coming into the country, but there is heavy competition by foreign goods, which are mostly of American manufacture.

Mains-driven sets are now becoming popular among dwellers in towns, and A.C. supply has now almost standardised in areas provided

(Continued at foot of column 2)

The Other Man's Point of View

News Bulletins on Short and Other Waves

NEWS BULLETINS during the past year or so have become one of the most important features of the programmes transmitted by the world's broadcasting studios. From the reading of a few paragraphs relating to the day's outstanding home and foreign topics the "radio journal" has developed so greatly that, undoubtedly, it may now be considered the main item of the transmissions and the one to which the majority of listeners look forward at the beginning of the broadcasts. In this respect the owner of an average wireless set, capable of receiving signals on the medium and long waves, not only turns to the home stations for his daily news bulletins transmitted through the entire BBC network, but if fairly proficient in foreign languages is given many opportunities of supplementing the service by hearing varying accounts and, in some instances where foreign events are concerned, eye-witness descriptions of the same incidents.

Just as a reader may gather the expressed opinions of newspapers of different political character on events of national or international importance, so the listener, by tuning in the various foreign broadcasts at his disposal, may gather the other man's point of view. With a few exceptions, however, the majority of foreign studios using medium and long wave channels confine the broadcast of news bulletins to a version in their native language. On the other hand, the development of programmes on what are commonly, and erroneously, termed short and ultra-short waves has impelled most countries to give their "radio journal" in languages other than their own, in order that their views and opinions may be heard by the world beyond their frontiers. It is this daily increasing service which offers to the possessor of an "all-wave," or, more truthfully, three or four band, receiver a radio news bulletin of which editions are issued almost hourly throughout the day and night. By this means not only is the lucky listener able to keep himself currently informed of all the world's news, but, in addition, possesses the manifest advantage of being at liberty to listen in his own time; he is not tied to certain fixed hours.

Primarily for my own personal use, I compiled the list now published, as from it I can see at a glance the different news bulletins available from the transmitters indicated at any given hour of the day or night. In this instance, for the sake of clarity the time-tables have been made out separately for each country, but from the data supplied it is an easy matter to establish an hour-by-hour schedule which shows the station and its frequency to be tuned in at any specified time. It has been found exceedingly useful where, as a diversion from foreign or other musical programmes, a "spot of news" is desired.

In addition, when the listener resorts to a late sitting news bulletins from overseas after midnight often contain items only available to him in the usual course through the medium of the next morning's papers at the breakfast table, and on most occasions when such bulletins have been heard at a late hour some items of news of vital interest have been captured.

Over and above the more or less official sources of information such as EAQ, Madrid (from which, by the way, I understand America's star radio reporter, Floyd Gibbons, is broadcasting a nightly review of Spanish happenings for the benefit of his audience in the United States), it is possible to pick up transmissions on other channels. As an example, it may be pointed out that during the present Spanish conflict the warring parties are using a number of frequencies in and around the amateur band for the purpose of inter-communication between cities and districts and for the transmission of news bulletins in the Spanish, French, Italian, and English languages. Daily at G.M.T. 19.30 you may tune to EA1AZ, Corunna, now working on about 42.20 m. (7,111 kc/s) which seems to be relayed simultaneously by two other smaller and weaker stations on approximately 42 m. (7,142 kc/s) and 42.80 m. (7,010 kc/s) and of which I have not yet succeeded in securing the call-sign. Try also for EDR3, El Tablero (Canary Isles), a 5-kilowatter working on 28.93 m. (10,370 kc/s), which, according to an announcement, takes its News Bulletin from the Radio Club of Tenerife. At present, the time-table is as follows: G.M.T. 19.30, war news in Italian, 20.00, in German, 20.20, in Spanish and English; and at 20.30 in French. On 43.04 m. (6,970 kc/s) for some time daily at G.M.T. 21.15 I have heard broadcasts from Radio Tetuan (Spanish Morocco), presumably EA9AH, which has also given the insurgents' version of the hostilities. In addition to these transmissions, a search of the 40 metre amateur band has revealed a number of broadcasts, mostly in Spanish, dealing with the Civil war. Here are a few of the smaller stations which have been identified: EA4JR and EA4CN Madrid; EA2BK, Vittoria; EA3DV, Sabadell (Barcelona); EAJ10, Radio Labor, Saragossa; EA5ZB, Valencia; EAJ2DH, Jaca; EA7PE, Granada; EA1BT, Sarria, Lugo; EA2EJ, San Sebastian; EA1DS, Torre Lavega; and EA3FE, Lugos—all, it would appear, amateur transmitting stations which have been voluntarily, or involuntarily, placed at the disposal of one or the other of the combatant forces.

Finally, on 41.50 m. (7,228.9 kc/s) you should hear on most evenings a series of multi-lingual calls such as: Ici ECN1, Radio CNT or FAI, Barcelona. Between G.M.T. 21.00-21.30 on Tuesdays, Thursdays, and Saturdays transmissions are carried out in the French language; in Italian on Mondays between 21.30-22.00 and on Saturdays between 17.30-18.00. In German news bulletins are given on Mondays and Wednesdays from 17.00-18.00, and on Thursdays and Fridays from 21.00-22.00. In each case the call is given in Spanish, followed by a translation—although the call-sign appears to differ—in the language of the listener to whom the transmission is dedicated.

If the latest news bulletins direct from the scene of operations are of interest to you, turn to your wireless receiver every evening; by tapping the short-wave Continental stations you can secure everybody's point of view.

J. G. A.

SHORT-WAVE TRANSMISSIONS OF NEWS BULLETINS

ZEESEN (Germany)	06.00 DJA DJB (Germ.)	07.00 DJA DJB (Eng.)	09.30 DJA DJB (Germ.)	12.00 DJE DJB DJQ (Eng.)	13.00 DJE DJB DJQ (Germ.)	14.00 DJE DJQ (Eng). DJA DJB (Dutch)	17.15 DJD DJL DJC (Germ.)	19.00 DJD DJL DJC (Eng.).
	21.00 DJD DJL DJC (Germ. Eng.)	22.45 DJD DJC DJN DJA DJR (Germ.)	00.15 DJA DJR (Span.) DJN alt. nights Port. & Span.	01.15 DJD DJC (Eng.)	02.00 DJA DJC DJD DJR DJN (Germ.)	03.30 DJD DJC (Span.)	DJA DJN DJR (Span.)	
RADIO-COLONIAL (France)	06.00 TPA2 TPA3 (Fr.)	09.15 TPA2 TPA3 (Fr.)	09.45 TPA2 TPA3 (Eng.)	12.00 TPA2 (Eng.)	12.45 TPA2 (Fr.)	17.15 TPA3 (Fr.).	19.30 TPA3 (Eng., Ital., Fr.)	
	22.40 TPA3 (Port.)	24.15 TPA4 (Fr.)	01.00 TPA4 (Eng.)	03.45 TPA4 (Fr.)	04.20 TPA4 (Eng., Fr.)	04.30 TPA4 (Span.)	05.45 TPA4 (Germ.)	
PRAGUE (Czechoslovakia)	21.25 OLR 19.689 m. (15,230 kc/s) (Eng.).				02.00-04.00 OLR 19.689 m. and 31.57 m. (9,504 kc/s) (Eng.).			
ROME (Italy)	15.00 12RO (a) (Eng.)	16.30 12RO (a) (Ital.)	17.15 12RO (a) (Sun. Eng.)	17.40 12RO (a) (Arab.)	18.00 12RO (a) (Germ.)	18.44 12RO (a) (Fr.)	22.59 12RO (a, b), (Eng., Ital.)	

BELGRADE (Yugoslavia) 21.15 (49.18 m.) (Fr.); 21.30 (49.18 m.) (Eng.) (6100 kc/s)

RUYSSELEDE (Belgium) 19.30 ORK (Flem., Fr.)

REYJAVIK (Iceland) 18.40 (24.52 m.) (12,235 kc/s) (Sun. only, Eng., Icelandic)

MADRID (Spain) 22.15 EAQ (Eng.)

MOSCOW (U.S.S.R.) 21.05 RNE (a) (Eng.); 00.00 RAN (b) (Eng. and Germ.)

RIO DE JANEIRO (Brazil) 23.00 PRF5 (Eng.)

PITTSBURGH (U.S.A.) 15.00 W8XK (a); 17.00 W8XK (a); 23.00 W8XK (a); 04.00 W8XK (c)

SCHENECTADY (U.S.A.) 16.00 W2XAD (Sun., Eng.); 23.30 W2XAF (Eng.); 00.50 W2XAF (Span.); 03.00 W2XAF (Eng.)

BOSTON (U.S.A.) 23.00 W1XAL (a) (Eng.).

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All times given in G.M.T. Transmissions indicated are made *daily* except where otherwise stated. Wavelengths and frequencies will be found in list at head of Short-Wave Programmes in this issue.

Letters to the Editor

THE TRANSATLANTIC STATIONS

SIR,—May I be allowed to make one or two comments on Mr. J. Powe's letter? I have deduced from my log-books (which date back several years) that reception of American transmitters depends mainly on barometric pressure over the Atlantic.

When there is an anti-cyclone situated over the Atlantic reception is very often good, but if there is a depression there it is invariably bad. I do not think it matters how weather conditions are in England—with the exception, of course, of thunderstorms.

There must be something wrong also with Mr. Powe's theory of moonlight affecting conditions, because American stations are often received in broad daylight after dawn as loud as before it. Besides, I do not believe moonlight could alter the properties of the Heavyside Layer in the darkness.

With regard to the power of CRCK, surely this is not so very low. I myself have often received American stations with powers of less than 500 watts at more than R5 signal strength.

Yours faithfully,
G. W. BARRON.

Whetstone, N. 20, October 23.

SIR,—I find reception of most short-wave stations to be almost 100 per cent. intelligible when the new moon appears on a clear, frosty night.

I should like to point out something which might be of use to some other short-wave enthusiast. First of all, disconnect the aerial of the short-wave set at the lead-in end, then attach a piece of rubber-covered wire under the set and fix it to the lead-in, leaving the other end free. After doing this I find reception of distant stations to be perfect.

Yours faithfully,
Forfar, Angus. JAMES PATON.

SIR,—I must thank Mr. J. Powe for his kindly interest in my letter. The reason why I used the phrase "in the springtime, with frosty weather and full moon" was because of remarkable reception from America and Canada which I enjoyed on two or three occasions last spring when these conditions prevailed. However, in view of my experience this autumn so far I readily fall in with Mr. Powe's contention that these are not the ideal conditions.

Regarding transatlantic reception on the medium-wave band, I think a high-powered set is the first essential. There are a few stations, such as WCAU, WBT, WTIC, WBZ, and WOR, which can be heard periodically with four valves, but for a general hook-up over the coast-to-coast network of the NBC or the CBS anything from six valves upwards is the ideal. If one is on the mains the difference in cost between running a four-valve set and a seven-valve set is not worth troubling about. My set is a seven-valve model now two years in use. I have had the set cleaned for the present "season," but the aerial has never been touched!

Yours faithfully,
JOHN P. WALSH.

Belfast, October 24.

Letters should be addressed to the Editor, "WORLD-RADIO," Broadcasting House, London, W.1. Letters intended for publication should be as brief as possible, and should always be accompanied by the full name and address of the writer, though not necessarily for publication.

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Which station was that?

The Alternative Postal Service

In addition to the free service of "Which Station Was That?" printed in these columns, replies to station identification queries can be obtained within forty-eight hours of receipt of details on payment of 6d. per query, in stamps, or P.O., accompanied by stamped addressed envelope (marked in left-hand top corner "Postal Query Service"), and coupon as per conditions for "Free Queries."

Free Queries

Each query should be numbered and the question on the coupon carefully answered. Letters must be addressed to the Editor, WORLD-RADIO, Broadcasting House, London, W.1.

IGNORAMUS (Dagenham): Either WGY, Schenectady (N.Y.), on 379.5 m., or LR10, Radio-Cultura, Buenos Aires (379.7 m.); more likely to be the former. **UNKNOWN (N. 16):** PMN, Bandoeng (Java), on 10,260 kc/s; local Javanese programme every Wednesday. **W. H. C. (Perthshire):** Yes, VUB, Bombay (31.36 m.). **BANDSPREAD (Magherafelt):** CRCX, Bowmanville (Canada), on 49.26 m., relaying CRC programme. **ALL-WAVE SIX (Liverpool):** HIN, Trujillo City (D.R.), on 26.56 m., the word heard was "Dominicana." **BANTAM COCK (Holborn):** (1a) we can trace the following ships: British: GCDQ, *Dagenham*; GCDS, S. *Rognvald*; GDZQ, *Lombardy*; GFQR, *Westcove*; GMRT, *Rodneystar*; GNRD, *Fastnet*; GNLR, *Ashby*; GYRS, *Standella*; French: FNBE, *Basse-Terre*; FOQC, *Charles L. D.*; Italian: IBLC, *Ardor*; U.S.A.: KDLM, *Wacosta*; KECS, *Duquesne*; Norwegian: LCTQ, *President Herrenschmidt*; Finnish: OHAM, *Bore I*; Danish: OXNH, *Gunvor Mærsk*; (1b) DOGC, *Erfurt*; DORH, *Reichenfels*; GFQC, *Gitano*; GFQM, *City of Paris*; GKDZ, *Heworth*; GKVZ, *Barrington Court*; GKVM, *British Motorist*; GLST, *Ceramic*; GNMD, *Beaverhill*; GQMJ, *Barnet*; GSTW, *Chorley*; GWRT, *Princess Maud*; GYBM, *Hawkwood*; GYCN, *Leicester City*; MBSS, *Miriam*; SINT, *Sveaborg*; (2) GGH, Barra Head Lighthouse (988 m.); D's possibly from Dyck Lightship (France) on 960 m. (3) Bureau de l'Union Internationale des Télécommunications at Berne (Switzerland); write for complete list as prices vary with different editions. **SON OF ADAM (King's Park):** Very vague; possibly WJZ, New York, 394.7 m., NBC blue network. **JEANNIEPIP (Lancing):** DGZ, Nauen (20.54 m.); DGW, Nauen (14.90 m.); WCI, Tuckerton (N.J.), 16,300 kc/s; GLG, Dorchester (15.74 m.); PCP and PCK, Kootwijk (Holland), on 16.01 and 16.30 m. respectively; KUN, Bolinas (Cal.), 16.61 m.; CEA, Santiago-Quilicura (17.23 m.); JAW, Tokio-Oyama (17.24 m.); DGR, DFA, and DFS, Nauen, on 17.30 m., 15.59 m., and 27.47 respectively; DGO, Nauen (22.68 m.); NPO, Cavite (Philippines), 23.78 m.; NPM, Pearl Harbor (Hawaii), 24.55 m.; OKB, Brno Aeradio; EAA, Aranjuez, through EAM, 30.70 m.; FFB, Boulogne-sur-Mer (35.50 m.); FLE, Eiffel Tower (36.76 m.); FLJ, Fort d'Issy (Paris), 32.50 m.; GIK, Oxford (56.34 m.); GLW and GLX, Dorchester, on 15.71 m. and 15.25 m. respectively. **POLY (Athens):** (1) the new N.I.R.O.M. transmitter at Batavia (Java), working on 19.80 m.; relays programmes broadcast through PMN, Bandoeng; the language was Dutch; (2) we believe that you must have misunderstood the call and that the broadcast heard emanated from EDR3, El Tablero (Canary Islands), a 5 kW transmitter working on 28.93 m., which broadcasts a news bulletin supplied by the Radio Club de Ténérife (EAJ43): moreover, you appear to have heard LSX (heard as ell-ess-aykis), Buenos Aires, on 28.98 m., which also works nightly. **ANDY ONE (Grays):** Regret, cannot trace. **WARD-END (Birmingham):** Possibly HS8PJ, Bangkok (Siam), testing on 29.5 m. **AMP (Killiney):** (1) WLW, Cincinnati, on 428.3 m.; note that WOR, Newark, works on 422.3 m. and not on 426 m. as stated in your enquiry; (2) there is no broadcasting station working on a channel between Moscow (No. 1) and Lahti; undoubtedly the former at that time in the morning; (3) WRVA, Richmond (Va.), 270.1 m. (NBC network); (4) KDKA, Pittsburgh (305.9 m.). **DALLY (Derby):** CGA, Drummondville (Quebec), 15 kW, on 16.5 m.; works telephony with Great Britain. **CAMBIO-CAMBIO (Wallington):** (1a), COCX, Havana, usually heard on 25.7 m., but wavelength varies; (b) LRX, Buenos Aires, last reported on 9,580 kc/s; (c) RW96, Moscow, works on 9,555 kc/s only; you may have heard RW99, Irkutsk (20 kW), on 9,610 kc/s; (d) EDR3, El Tablero (Canary Islands), on 10,370 kc/s, relays the broadcasts of the Radio Club de Ténérife, EAJ43; (2) HJ4ABU, Pereira (Colombia), last reported on 6,145 kc/s; commercial telegraphy stations: GLN, Ongar (19,510 kc/s); HRX7, La Honduras, Lima (13,810 kc/s); FZO, Hanoi (Fr. Indo-China), 15,544 kc/s; IRL, Rome-Torrenova (19,656 kc/s); KWP, Palo Alto (Cal.), 15,535 kc/s; KKL and KEE, Bolinas (Cal.), on 15,475 and 7,715 kc/s respectively; KWM, Palo Alto (14,740 kc/s); RIR, Tiflis (10,080 kc/s); ORP, Ruysselede (13,170 kc/s); TAG, Istanbul (13,090 kc/s); XOF, Shanghai (11,975 kc/s); YBF, Medan (Sumatra), 9,930 kc/s; YSL, San Salvador (14,985 kc/s); ZPZ, Asunçion (Paraguay); 8,705 kc/s; WOY, Lawrenceville (N.J.), 17,120 kc/s; WHL, Hicksville (N.Y.), 10,750 kc/s. **WGY (Dun Laoghaire):** Surely VUC, Calcutta (49.1 m.). **LUXEMBOURGIAN (Banstead):** (33) regret, cannot trace; (34) a background of Motala is reported on this channel. **ORIENTAL (Welling):** Yes, Cairo working on same channel can often be heard in the intervals of the Brussels broadcast. **SCOUT (Guernsey):** (1a) HSG2, Bangkok (Siam), 1 kW, working on 15,530 kc/s; the call heard may have been HS8PJ, which is that reserved for broadcasts; (2a) DZB, Zeesen (29.87 m.). **LINDISFARNE (Hale):** (1) PMN, Bandoeng (29.24 m.); (2) possibly a test by IBR, Rome-San Paolo, on 20.89 m.; the word heard was "Pronto" (attention or stand-by); VLZ, Sydney, on 37.69 m. is rated at 3.5 kW. **V. M. H. (Dalblain):** (1) possibly HIH, San Pedro de Macoris (D.R.), on 44.03 m.; (2) HIT, Trujillo City (D.R.), on 45.25 m.; (3) TI2PG, San José (Costa Rica), on 46.8 m.; heard by other listeners. **GOGGLES (Roscrea):** PMN, Bandoeng (Java), on 10,260 kc/s; local Javanese programme. **ANON (Wimbledon):** Regret, cannot trace. **OOWOZZITT (Bedford):** (1) EDR3, El Tablero (Canary Islands), on 28.93 m.; 5 kW; relays EAJ43, Radio Club de Ténérife; the address is: Alvarez de Lugo, 1, Santa Cruz de Ténérife, Canary Islands; (2) OLR, Podebrady, Prague, Czechoslovakia; the channels officially allotted are: 13.99 m.; 19.70 m.; 25.26 m.; 25.51 m.; 25.54 m.; 31.57 m., and 49.06 m., but all may not be used regularly; (3) surely not German but Dutch, and apparently PMN, Bandoeng (29.24 m.); the address is: Naamloze Vennootschaap Nederlandsch-Indisch Radio Omroep Maatschappij, Koningsplein, 5W, Batavia (Centrum), Java, D.E.I. **BLACK COMBE (Barrow-in-Furness):** Radiodifusora La Voz del Aire, COCD, Box 2294, Havana, Cuba. **WHO (S.E.6.):** See reply to "Italiano." **SHORT-WAVER (Ilfracombe):** (1) DJB, Zeesen (19.74 m.); (2) addresses required as under: LZA, Radio Garata, Direction Générale des Postes, Télégraphes et Téléphones Sofia, Bulgaria; OLR, Radio Podebrady, Prague, Czechoslovakia; JVH, Broadcasting Corporation of Japan, Osaka Buildings, Kojimachiku, Tokio, Japan. **ITALIANO (Dolton):** Twelve metres would approximate 25,000 kc/s, not 21,600 kc/s; Rome (12RO) is entitled to use 11.69 m. (25,650 kc/s) and 13.95 m. (21,510 kc/s), but what you heard is more likely to be the second harmonic of the broadcast on 25.4 m. (11,810 kc/s). **LIGHT-SHIP (Ilford):** (1) GJLM, *British Advocate*, and GJRN, *British Captain*, 800, 705, and 600 m., also short-wave channels between 36.45 and 36.01 m.; 27.20 and 27.03 m.; 24.31 and 24 m.; and 18.23 and 18.01 m.; GLNV, *British Dominion*; 800, 705, 600, and 450 m.; the following work mainly on 600 m.: GFQL, *British Tommy*; GKMS, *British Admiral*; GKTB, *British Aviator*; GLZR, *British Glory*; GCRF, *British Renown*; GLNJ, *British Petrol*; and GLDC, *British Star*; (2) consult the List of Admiralty Signals published by H.M. Stationery Office; (3) we regret that we cannot supply this information. **BEATS ME (Bristol):** Details too vague to identify transmitter, as it might be any commercial station testing. **FASCISTI 111 (Catford):** (1) 12RO3, Rome (31.13 m.); the call heard was Radio Roma-Napoli; (2) cannot trace as call is incorrect. **PLUM (Bradford):** (4) EDR3, El Tablero (Canary Islands), on 28.93 m., but war news bulletins are also broadcast through EDZ, Madrid, on 31.65 m.; (5) COCX, Havana (Cuba), on 25.7 m.; (6) WQV, Rocky Point (N.Y.), on 20.27 m. **SEARCHER (West Hartlepool):** Regret, cannot trace. **B. R. S. 1646 (Southampton):** We can trace the following: GAD, GBT, GBY, Rugby, on 19,480, 61.5, and 66.5 kc/s respectively; GMJ and GMK, Bodmin, on 18,580 and 18,100 kc/s respectively; GIL, Oxford (14,955 kc/s); GNH, Grimsby (11,585 kc/s), GLJ and GNC, Carnarvon, on 67.49 and 34.88 kc/s respectively; GHQ, Aldershot (4,895 kc/s); GIU, Dollis Hill (8,150 kc/s); the following are calls from Ongar: GME, (18,270 kc/s); GMI (18,500 kc/s); GNE (11,635 kc/s); GOF (10,205 kc/s); GOI (8,780 kc/s); GNO (11,605 kc/s); GNL (12,070 kc/s); GOL (9,365 kc/s); GLS (18,595 kc/s); GNK, Bodmin (13,805 kc/s), and GOJ, Bodmin (8,820 kc/s). **SOUTH AMERICAN MADNESS (Langold):** (1) no, more likely to be LR4, Radio-Splendid, Buenos Aires (303 m.); (2) LR5, Radio-Excelsior, Buenos Aires (361.4 m.); (3) LR3, Radio-Nacional, Buenos Aires (315.8 m.); (4) LS10, Radio-America, Buenos Aires (508.5 m.). **NEMO (Thornton Heath):** There is no French short-wave transmitter working on this channel; possibly some harmonic of a French medium-wave station. **DASHTHEDOT (Ilford):** From the morse transcription you give it is possible to make five different call-signs as you do not show the spacing of letters; regret, cannot trace.

Owing to pressure on space, we have had unavoidably to hold over a number of replies.

IDENTIFICATION COUPON (No. 403)

This coupon is valid for ONE QUESTION only and should be cut out and attached to a separate sheet, upon which the following questions should be answered in the order shown. *A copy of the answers should be enclosed with FREE queries.* No coupon more than one month old is valid. A coupon is not required from readers living in countries outside Europe who desire identification of transmissions.

1. Time and date of reception.
2. Approximate frequency in kilocycles per sec. (or wavelength in metres).
3. Nearest known stations, above and below.
4. Call, or interval signal, if heard.
5. Language.
6. Type of receiver in use and strength of signals.
7. Details of programme or signal received.
8. Name and address.
9. Nom de plume. (*Proprietary names must not be used.*)

AMATEUR TRANSMITTERS

The identity of amateur transmitters may be found in the "Radio Amateur Call Book." The Autumn Edition (price 6s. post free), is now ready and may be obtained from the Publications Department, BBC, Broadcasting House, London, W.1. The 1936 Edition of the "Radio Amateur Handbook" may also be obtained, price 5s. 3d. post free, from the above address.

WAVELENGTH DEVIATIONS

The following list shows the deviations of stations as measured at the Tatsfield Checking Station, during the past week:

	Kc/s	m.
Tartu (Estonia)	516	581.3
Sofia (Bulgaria)	846.8	354.2
Cork (Irish Free State)	1,234.8	242.9

Esperanto Transmissions

Sunday—Lille, 9.15 a.m. Esperanta Duonhoro. Leningrad (1,293 m.) 9.20 p.m. Parolado. Hilversum (1,875 m.) 10.40 p.m. Eklezia Prelego. Monday—Barcelona (41.72 m.) 5 p.m. Informoj pri la Hispana Civilmilto. Sottens, 5.30 p.m. Elementa Kurso. Radio-Lyons (215 m.) 6.30 p.m. G. Pouchet: Kurso. Radio-Normandie, 9.00 p.m. Esperanta Novajo. Tuesday—Moravská-Ostrava, 5.00 p.m. Parolado. Tallinn, 7.00 p.m. Informoj pri Estonio. Rio de Janeiro (35.58 m.) 10.30 p.m. Oficialaj kaj Ekonomiaj Informoj, ankaŭ Esperantaj. Wednesday—Paris (431 m.) 2.00 p.m. Kurso. Barcelona, 9.0 p.m.—See Monday. Prague and relays, 9.15 p.m. Opero: La Vendita Fianĉino. Leningrad (1,293 m.) 9.50 p.m. Prelego pri Rusujo. Thursday—Kaunas, 8.45 p.m. Informoj pri Litovujo. Barcelona, 9.00 p.m. See Monday. Friday—Leningrad (1,293 m.) 9.50 p.m. Kronikoj pri U.S.S.R. Saturday—Rome (medium and short-wave) 6.05 p.m. Programo pri Turismo.

A Recruit to the Ether

I RECENTLY witnessed an interesting ceremony: the inauguration of the latest, and perhaps the smallest, regular broadcasting station in the world. Radio Barcelona ECP1, broadcasting on a wavelength of 42 metres, belongs to the Workers' Party of Marxist Unity, the I.L.P. of Spain, and is the latest recruit to the war of rival ideologies which is convulsing the Spanish and the European ether to-day. The Anarchist and Communist Parties were first in the field with transmitters, and now the Workers' Party completes a lively trio.

It was a near thing whether the ceremony was going to take place or not. The *Mañana* principle—*i.e.*, always put off till to-morrow what you ought to do to-day—is still strong in Spain, although the civil war is gradually undermining its influence. To-day, however, won, and a bunch of us found ourselves in one of the fast cars requisitioned by the working-class parties in the stormy days of last July. We drove away from the wide Ramblas, the boulevards of central Barcelona, where everyone promenades in the evening. There a great funeral procession was gathering in honour of the fallen on the Aragon front beneath the red flags of the Marxists, the red and black of the Anarchists, and the red and yellow of the Catalan nationalists.

At length, after a hair-raising journey at breakneck speed, we reached the temporary broadcasting station, situated in a private house in the outer suburbs high above the city. About a dozen of us, a polyglot collection of both sexes, gathered together in the tiny room, ten feet square, in which the transmitter, of modern type, with an input of 70 watts, is placed. Enthusiasm overcomes all obstacles. The engineer acted as announcer, and while whispered consultations took place and broadcasters sat outside on the stairs, hurriedly writing their material, the first announcements were made in Spanish and Catalan. Then followed manifestoes in English (by an Englishwoman who is a member of the Militia), French, German, Italian, Dutch, and Russian. This last is of some interest, as the Workers' Party is in sharp disagreement with Moscow, and is taking the opportunity of doing a little propaganda on its own account. Most of the other material for the broadcast (news from the fronts and a talk on the agricultural problem) came from the columns of *La Batalla* (The Battle), the daily paper of the Party. J. W.

Book Notices

WE have received from Whitfield, King and Co., of Ipswich, their *Standard Catalogue of Postage Stamps of the World* (36th Edition, 5s.). Those collectors who read the article "Wireless and Postage Stamps" which appeared in last week's issue of WORLD-RADIO may find it of interest to search the catalogue for stamps designs of which have some connexion with wireless but which were not mentioned specifically or by implication in that article. The growing number of air-mail issues which are in the main indirectly concerned with wireless form an almost inexhaustible supply. We are told in the Preface that the total number of stamps issued to date, as included in this catalogue, is 62,155. The fact that 1,380 stamps have been added to it since the previous edition indicates the extremely wide field open to the general collector.

Forty-five Million Friends, by E. J. Smith (Cosmopolitan Press), is the title of "a short manual on sales organisation and advertising," on both of which subjects the author writes with knowledge. The book contains a foreword by Sir Francis Goodenough—an undoubted authority.

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THIS WEEK THE BAIRD SYSTEM WILL BE USED.

At the close of each afternoon programme a chart arranged in co-operation with the Air Ministry will forecast the weather.

MONDAY, November 2

3.0 p.m.—Opening of the BBC High Definition Television Service by Major the Right Hon. G. C. Tryon, M.P., H.M. Postmaster-General, including Speeches by the Right Hon. the Lord Selsdon, K.B.E., Chairman of the Television Advisory Committee, and Mr. R. C. Norman, Chairman of the BBC.
3.15—Interval, Time, Weather.
3.20—British Movietone News.
3.30—Variety : The Lai Founds, Chinese Jugglers ; Adèle Dixon, Singer ; Buck and Bubbles (Comedians and Dancers). The BBC Television Orchestra (Leader, Boris Pecker ; Conductor, Hyam Greenbaum). Produced by Dallas Bower.
4.0—Close.
9.0—Programme Summary.
9.5—The BBC Documentary Film : "Television Comes to London."
9.20—Picture Page : a Topical and Interest Magazine of Novelties. Devised and Edited by Cecil Madden, produced by G. More O'Ferrall. Stage Manager : Peter Bax. The Switchboard Girl : Joan Miller.
9.50—British Movietone News.
10.0—Close.

TUESDAY, November 3

3.0 p.m.—Programme Summary.
3.5—Illustrated Talk — Alsatians. Champion Alsatians from the Metropolitan and Essex Canine Society, with commentary by A. Croxton Smith, O.B.E.
3.15—British Movietone News.
3.25—"The Golden Hind." A model of Drake's famous ship made by L. A. Stock, a Bus Driver, who will describe its construction.
3.40—Interval, Time, Weather.
3.45—Starlight—Bébé Daniels and Ben Lyon, the Hollywood Film Stars, in their speciality, including songs from "Rio Rita."
4.0—Close.
9.0—Programme Summary.
9.5—Alsatians (see 3.5).
9.15—British Movietone News.
9.25—"The Golden Hind" (see 3.25).
9.40—Interval, Time, Weather.
9.45—Starlight. Manuela Del Rio in Spanish Dances, accompanied by Pianoforte and Guitar.
10.0—Close.

WEDNESDAY, November 4

3.0 p.m.—Programme Summary.
3.5—Martin Taubman with his Electronde—a demonstration of its Music and Effects.
3.20—British Movietone News.
3.30—Interval, Time, Weather.
3.35—The BBC Dance Orchestra, directed by Henry Hall, with Molly, Marie, and Mary (The Three Sisters), Dan Donovan and George Elrick.
4.0—Close.
9.0—Programme Summary.
9.5—British Movietone News.
9.15—Tempo and Taps : Rosalind Wade in a demonstration of Tap Dancing.
9.35—Interval, Time, Weather.
9.40—Martin Taubman (see 3.5).
10.0—Close.

THURSDAY, November 5

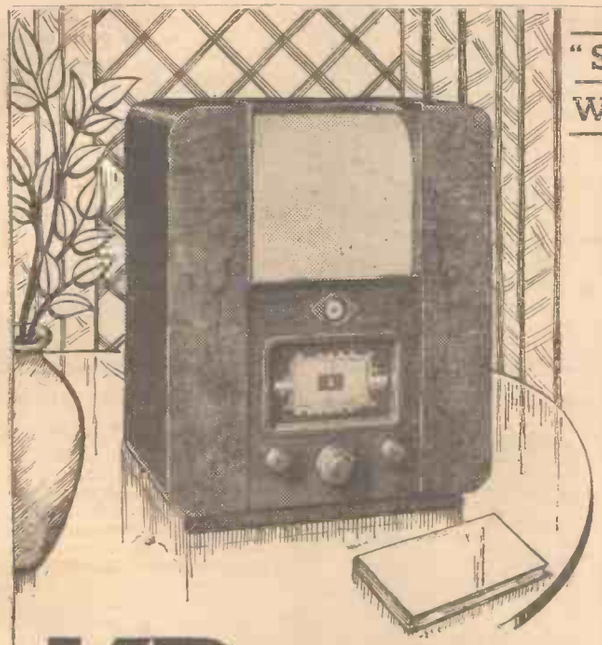
3.0 p.m.—Programme Summary.
3.5—British Movietone News.
3.15—Interval, Time, Weather.
3.20—The Mercury Ballet. Marie Rambert's Company in Pavane and Tordion from Capriol Suite (Warlock. Choreography by Frederick Ashton). Solo from Swan Lake and Sugar Plum Fairy (Tchaikovsky). Shepherd's Wooing (Handel, arr. Beecham). Solo from Foyer de Danse (Berners). Columbine (Tchaikovsky). La Golfeuse and Pompette (Hugh Bradford). Pas de Trois from Alcina (Handel) with Maude Lloyd, Walter Gore, Andrée Howard, Frank Staff, Hugh Laing. The BBC Television Orchestra. Leader, Boris Pecker. Conductor, Hyam Greenbaum.
3.45—BBC Documentary Film, "Television Comes to London."
4.0—Close.
9.0—Programme Summary.
9.5—British Movietone News.
9.15—Autumn Glory. Prize Chrysanthemums from the National Chrysanthemum Society's Show. Described by W. Wardman and E. F. Hawes.
9.30—Interval, Time, Weather.
9.35—The Mercury Ballet (see 3.20).
10.0—Close.

FRIDAY, November 6

3.0—Programme Summary.
3.5—Silver Fox Breeding. Four Foxes will be exhibited by a representative of the Silver Fox Breeders' Association of Great Britain and Northern Ireland.
3.20—British Movietone News.
3.30—Interval, Time, Weather.
3.35—From the London Theatre : Sophie Stewart (By permission of London Film Productions, Ltd.) in scenes from The Royalty Theatre production, "Marigold," a Scottish Comedy, by L. Allen Harker and F. R. Pryor. Jean Clyde, Walter Roy, John Bailey, Brenda Harvey, Violet Moffat. Presentation by G. More O'Ferrall.
4.0—Close.
9.0—Programme Summary.
9.5—British Movietone News.
9.15—Boxing : A Demonstration of Training by Members of the Alexandra Amateur Boxing Club.
9.35—Interval, Time, Weather.
9.40—"Television Comes to London" —A BBC Film.
10.0—Close.

SATURDAY, November 7

3.0 p.m.—Programme Summary.
3.5—The Zoo To-day. Some animals with their keepers. Introduced by David Seth-Smith.
3.20—British Movietone News.
3.30—Interval, Time, Weather.
3.35—Cabaret : Mabel Scott (Singer of Modern Songs), Horace Kenney (Comedian), Molly Picon in songs and impressions. The BBC Television Orchestra. Conductor, Hyam Greenbaum.
4.0—Close.
9.0—Programme Summary.
9.5—The Autumn Galleries. Pictures and Sculpture from Forthcoming Exhibitions. Described by John Piper.
9.20—British Movietone News.
9.30—Interval, Time, Weather.
9.35—Cabaret (see 3.35).
10.0—Close.



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Interruptions in Short-Wave Communication

By Professor E. V. APPLETON, F.R.S.

THERE was plenty of evidence at the recent wireless exhibition that the British radio manufacturer is seeking to convert us all to short-wave listening. As I think there is no doubt that he will be successful, it follows that, as time goes on, more and more members of the listening public will acquire a detailed acquaintance with a very fascinating subject. The subject is attractive because of the variety and complexity of the reception conditions which are encountered. In the early days it seemed well-nigh hopeless to attempt to give any systematic description of the way in which received long-distance signals varied with time and with wavelength. But the important extension of the use of short waves to the commercial services has led to the collection of a vast amount of information, and now we are gradually getting much clearer ideas concerning the way in which signals vary with the hour of the day and with the season of the year.

Wireless "Fade-Outs"

During the last eighteen months there has been carried out a very careful investigation of a subject which is of the greatest importance in short-wave listening. I refer to those general interruptions of short-wave communication which are known as "fade-outs." In the case of broadcast reception from a local station on the long and medium waves, we all know that a complete cessation of loudspeaker response is either due to a technical hitch at the sending station or to some fault in our own receiver. Whether it is one or the other is usually ascertained by trying another receiver or asking one's neighbour about his reception. But the striking thing about a short-wave "fade-out" is the large extent of its influence, for it is found that listeners scattered over a whole continent will usually give exactly the same account of the cessation of signals and of the gradual recovery to normality after a period which is measured in minutes.

The subject of these short-wave interruptions was first drawn to the attention of the general public by Dr. J. H. Dellinger, a well-known American radio investigator, who is the head of the wireless section of the Bureau of Standards at Washington. He stated that his own attention to the subject had been first attracted by a communication from a correspondent in France who reported that on May 12, 1935, all high-frequency circuits of which he had information had suffered a temporary interruption. Beginning at 11.57 G.M.T., signals had disappeared completely in three minutes. After a further period of a few minutes signals got gradually stronger and resumed normal intensity at 12.15 G.M.T.

In his original communication on the subject, Dr. Dellinger pointed out that this particular "fade-out" appears to be one of a series of four, of very similar character, which had occurred on March 20 (01.50 to 02.05 G.M.T.), May 12 (11.57 to 12.15 G.M.T.), July 6 (14.09 to 14.25 G.M.T.), and August 30 (23.20 to 23.35 G.M.T.), 1935. There further appeared to be a most remarkable characteristic about the incidence of the "fade-outs," for it was noted that only those wireless circuits on the illuminated part of the earth were affected. Dr. Dellinger further pointed out that the above dates were approximately equally spaced in time, there being three intervals of 53, 55, and 55 days respectively. He therefore stated that we were here dealing with a phenomenon which recurs after a time equal to twice that required for the sun to revolve.

During the latter half of last year there was a careful watch kept to see if any further "fade-outs" occurred which appeared to belong to this series. The period in question was October 21 to 25, but although the ionisation in Region F_2 of the ionosphere was abnormally low on October 24, 1935 (which was 55 days after the August "fade-out") it cannot be said that the phenomena of the previous occasion were repeated. During 1936 further "fade-outs" have occurred, one on February 14, and another, of a very general character, on April 8. It may be noted that these days are separated by a period of 54 days.

Solar Eruptions

The "fade-out" on April 8 is of very special interest because of the other solar and terrestrial phenomena which were noted at exactly the same time. Nowadays, most solar physics observatories are making studies of the sun's disc, using what is called a spectrohelioscope. This instrument permits an examination, visual or photographic, to be made for solar light of a single wavelength. Usually the wavelength known as Hα of Hydrogen, which is in the red end of the spectrum, is used.

Using the spectrohelioscope, it has been possible to study what the solar physicist calls *bright eruptions* on the sun's surface. These bright eruptions appear to consist of brilliantly glowing masses of vapour localised in the chromosphere and situated close to sunspots. They are known to increase suddenly in luminosity and then fade gradually in a period which may vary from several minutes to a few hours.

Dr. J. H. Dellinger, of the Bureau of Standards, Washington

Now the interesting feature of the April 8 "fade-out" is that, according to Dr. R. S. Richardson, of the Mount Wilson Observatory in America, it occurred at almost exactly the same time as the beginning of a bright eruption on the sun. He reports that he had been unable to make any special observations on the sun's markings during the period of the February "fade-out," because of the continuously cloudy weather from February 10 to 19, 1936, and so planned to make an intensive study of conditions round the period April 6 to 10, which was fifty-four days later.

Dr. R. S. Richardson, of Mt. Wilson Observatory

On April 8, as a result of a series of photographic examinations of the sun's disc, using the spectrohelioscope, he found that a bright eruption occurred on the sun, beginning about 16.45 (G.M.T.), reaching maximum brightness at 16.52 (G.M.T.) and then decreasing in intensity until about 18.30 (G.M.T.), when the appearance of the group of spots with which the eruption was associated appeared to be normal. A very similar description of the same eruption has been published by Messrs. Torreson, Scott, and Stanton, of the Huancayo Observatory, in Peru, activity being first noticed at 16.45 (G.M.T.).

The nature of the radio "fade-out" can best be summarised by Dr. Dellinger's statement, which reads :—"Another striking and widespread 'fade-out' of high-frequency radio signals occurred on April 8, starting at 16.46 (G.M.T.) and lasting from fifteen to thirty minutes at various radio frequencies. This was observed in England as well as here." A further interesting feature of the notable events of April 8 is that there was a sudden disturbance in the magnetic elements beginning at 16.45 (G.M.T.), which is exactly the time of the incidence of the "fade-out."

As a result of the remarkable observations set out above, it does appear that we may have to extend our ideas concerning the nature and origin of the solar influences on radio transmission phenomena. It has, of course, been known for some time that short-wave reception is often poor when magnetic storms are in progress. But it has usually been supposed that a magnetic storm is due to the injection into the upper atmosphere of charged particles from the sun, and also that these charged particles take from twenty-four to twenty-six hours to travel from the sun to the earth. The reason for the latter conclusion is that magnetic storms have been frequently noted to occur about twenty-five hours after some solar event such as the passage of a sunspot over the sun's central meridian.

The events of April 8, however, suggest that conditions in the ionosphere were disturbed at

(*Continued in col. 2, page 11*)

Anti-Interference Aerials

By R. W. HALLOWS

To wireless listeners in general, and to short-wave enthusiasts in particular, man-made interference is a great nuisance nowadays. If your reception is confined to the medium and the long waves you may have little or no cause for complaint should you be fortunate enough to live in a locality where electrical machinery and domestic appliances of types that radiate interference are not in use. But the short-wave listener is seldom completely free from it, for the ignition systems of so many motor vehicles send out trains of waves which give rise to very loud, unwanted noises when the set is tuned to a wavelength below 100 metres.

Since so many homes stand in streets or on roads along which there is a more or less dense stream of motor traffic, this kind of interference has become a serious problem. There is little fun in using a short-wave set or in switching an "all-wave" receiver over to its short-wave range if one's reception is interrupted by ear-splitting *rat-tat-tat-tat-tats* every time a car, motor-cycle, or lorry goes past. Not all motor-ignition systems do radiate, by the way, and of those that do some are much worse offenders than others.

Zone of Interference

Investigation has shown that what is known as the "field" of car-ignition interference and of certain other kinds of man-made static is of a peculiar shape. The field may be described as the zone within which it can be a nuisance. You might expect that the waves which cause the trouble would be radiated with equal strength in all directions—upwards as well as outwards. But this is not so. Many kinds of interference have a comparatively long range horizontally, though the impulses responsible do not rise very high above the source from which they come. Thus, you may hear the rattling sound caused by radiation from an ignition system some little time before the vehicle reaches your house. Faint at first, it increases in loudness as the car approaches, reaches its maximum whilst it is actually passing, and then wanes as it recedes into the distance.

If, though, you were to conduct your reception on a church tower or at the top of a high building, car after car would pass without there being any response from the set. So long as the whole of your aerial *and its down-lead* were some 25ft. above the source of the interference they would be outside the field and would pick up nothing.

Now consider what happens when either an "inverted-L" aerial (Fig. 1 (*a*)) or a "T-aerial" (Fig. 1 (*b*)) of ordinary type are used. In both instances the horizontal portion, or "roof," may be high enough to be outside the field of interference. The roof, therefore, picks up only the wanted signals and is not affected by the interference.

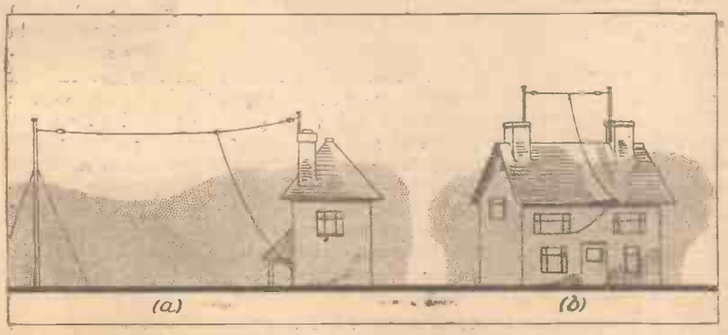

Fig. 1—Plain aerials of inverted-L (a) and T type (b) pick up interference on the down-leads. The shading indicates the "field" of the interference

But what of the down-lead? It goes right down through the interference field, forming a vertical or semi-vertical aerial, and collects the interfering impulses. They thus become mixed with what the roof of the aerial is bringing in and cause the receiving set to emit unpleasant noises. If only we could find some kind of lead-in that did not act as a collector, we could get rid of a great deal of interference by suspending the roof high enough.

That, exactly, is the principle of the anti-interference aerial, of which many kinds are now available. You might think that the simplest solution would be to use a screened down-lead of ordinary metal-sleeved wire with the sleeving earthed. That wouldn't quite do, for unless it is very short, the capacity to earth of such a lead is so high that it is very inefficient on the long and medium waves and altogether hopeless on the short.

Transmission Line

The solution is to do away with the usual type of down-lead and to use instead what is known as a transmission line. This may be a metal-screened cable so designed and made that the capacity is reasonably low; or it may be a length of stout, unscreened double flex, twisted so that interference impulses in the two leads tend to cancel out. But neither screened cable nor special flex would be effective were they connected directly between the roof of the aerial and the terminals of the receiving set.

An examination of Fig. 2 shows that two transformers are used in the anti-interference aerial system. One of these is in the roof of the aerial, the other near the receiving set, or actually built into it. The transmission line is connected between them. We shall see presently what is the purpose of the transformers, but to understand how the system works we must first of all spend a moment or two in thinking about the electrical property known as *impedance*. Impedance is to oscillating currents very much what resistance is to direct currents.

Impedance Matching

If current from a battery is passed through leads of low resistance it does not have to force its way through by working hard, and the voltage drop is small. On the other hand, when a high resistance is introduced, work must be done and a considerable fall in voltage takes place across the resistance. So with impedance. Both the aerial system and the tuned circuits of the receiving set are high-impedance circuits. Oscillating currents do work in them, setting up the voltage variations which are applied to the grids of the valves. The plain down-lead is also of the high-impedance variety: hence its proneness to pick up unwanted radiations.

A step-up or step-down transformer may be regarded as an electrical gearbox, which matches the work done to the opposition encountered. When you are driving a car up a steep hill you change down to match the engine's work with the "impedance" that has to be overcome. On passing the crest you perform a further matching operation by changing up again. That is very much what happens in the anti-interference aerial. The roof offers a high impedance to oscillations, but that of the transmission line is very low. Transformer B in Fig. 2 "changes up" and the set transformer at the bottom of the line "changes down" again to match the high-impedance tuned circuits of the receiver. The net result is that the transmission line becomes a mere connector between the roof and the receiver; it is not a collector of impulses or, at any rate, not a good one.

There are many other advantages, too, about the use of a low-impedance transmission line. It can be of great length without introducing serious losses; its oppostion to the flow of current is small, and capacity effects become negligible. At the present time I am using a transmission line some 70 ft. in length between the aerial and the receiving set. It is treated with a fine, free disrespect such as could not possibly be shown to a plain down-lead and lead-in. For instance, it is stapled to picture rails, door frames, and skirting boards just as if it were

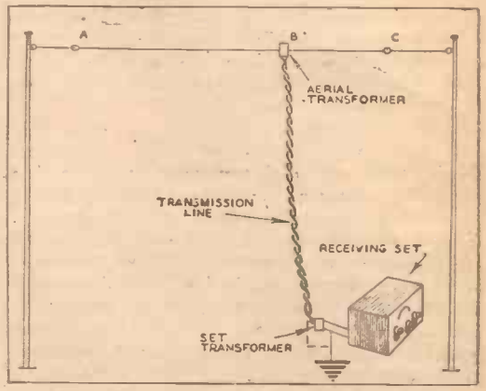

Fig. 2—Illustrating the principle of the anti-interference aerial

nothing more important than electric bell leads. Yet the aerial to which it is connected gives me efficient interference-free reception in a house near which there are several pieces of electrical machinery which radiate strongly, and past which there is a heavy stream of motor traffic. It also gives me far better reception with an "all-wave" set than I could obtain with a plain inverted-L or a T-aerial.

You will notice, on re-examining Fig. 2, that the roof is divided unequally by the transformer. The portion between A and B is much longer than that between B and C. By means of a switch incorporated in the set transformer, this can be operated automatically by the wave-change switch if the transformer is built in; the whole "roof" can be used for medium and long-wave reception, though for short-wave work only the "short-leg" B-C is in action. Aerial and set are thus matched to the work in hand.

Strictly speaking, one ought to have three aerials of the "plain" type for long, medium, and short waves, the length of the roof bearing in each case some relation to that of the received waves. The simplest anti-interference aerial with unequal "legs" in its roof and only two positions for the switch of the set transformer helps one to effect a compromise by using one part of the aerial for medium and long waves, and another for short. Some systems go further. The "long leg" is used for the medium waves, the "short leg" for short waves, and the whole roof for long waves.

In any event the user of an "all-wave" receiver gets far better results—apart from freedom from interference—from the unequally divided transmission-line aerial, which always gives him a better match between set and aerial than he can obtain by other methods. The anti-interference transmission-line aerial doesn't cost a great deal, and I can say from experience that it's very well worth while.

Short-Wave Stations of the Far East

SHORT-WAVE listeners all over Malaya, India, Ceylon, China, Australia, Japan, and the Far East generally are being benefited by the activities of the leading broadcasting society of the Netherlands Indies known as N.I.R.O.M.

This progressive broadcasting institution, which was formed about three years ago under a concession from the Netherlands Indies Government for a period of ten years, now has more than 20,000 subscribers. The present subscription to the society is 7 guilders (about £1) per quarter—to be reduced to 5 guilders when the number of licence-holders exceeds 25,000—and as long as the concession is in force no others will be allowed to broadcast commercially.

Nirom's key transmitter is situated at Tanjong Priok and uses a power of 10 kW. In order to ensure reception in the outer Dutch possessions of the Netherlands Indies—such as Celebes, Dutch North Borneo, etc.—two additional transmitters belonging to the Postal and Telegraph Department of Bandoeng were brought into use early this year for relaying Nirom's daily programmes. These are PLP on 11.00 Mc/s (27.2 m.) and PMN on 10.26 Mc/s (29.2 m.), and are well known among short-wave listeners everywhere.

Since July, 1936, Nirom has added still another short-wave transmitter to their chain of stations—namely, YDC, on 15.00 Mc/s (20 m.)—which is now "on the air" simultaneously broadcasting the Nirom programmes daily from 23.00 to 00.30; 03.30 to 07.20; and from 10.30 to 14.30 (G.M.T.). Apart from these, YDC may also be heard at other times with experimental transmissions of recorded music.

Radio Saigon

For some weeks past a new transmitter in French Indo-China has been heard broadcasting English, French, and native programmes on a wavelength of 25.2 metres between the hours of 11.40 and 14.40 (G.M.T.). Reception over most of the Eastern countries has been reported to be excellent at strengths varying from a good R8 to R5.

The station—which some listeners will remember having heard three or four years ago, on 49 metres—is owned and operated by a private commercial undertaking that handles radio products. In a communication received from the operators of the Saigon station they state that they are very pleased with the success of the experimental transmissions and that they hope to effect improvements to their transmitter, as well as to their programmes, in the near future.

Bangkok, Siam

After being inactive for a couple of years or so, Siam, too, has re-entered the field of short-wave broadcasting with renewed vigour, and is now broadcasting on 10.95 Mc/s (27.38 m.) on Mondays from 13.00 to 15.00 (G.M.T.) through HS8PJ, at Bangkok. The programmes consist of European and Siamese music, announcements being made in English, Siamese, French, Spanish, and Dutch.

Kuala Lumpur

The Government of the Federated Malay States has decided to increase the power of the Kuala Lumpur transmitter ZGE. The present transmitter was bought by the Malayan Government in 1931 for working internal services mainly on C.W. and I.C.W., but which was later adapted for speech transmission.

During next year the authorities expect to link up with Great Britain by radio-telephony, and then a much more powerful set than the present one, which employs an aerial energy of only 0.18 kW, will be necessary.

The Kuala Lumpur transmitter is loaned to an amateur radio society, which provides the programmes for the broadcasts. These take place on Sundays, Tuesdays, and Fridays from 11.40 to 13.40 (G.M.T.). At present even listeners in Malaya complain that Kuala Lumpur is not well heard in their territory. This is partly due to the high static level usual in the tropics on the 49 m. broadcast band. When the power is increased to 1 or 2 kW the listeners of the Kuala Lumpur radio society's programmes will be benefited considerably, since it will then be the most powerful station in Malaya.

It has been reported that Kuala Lumpur is being heard in India and other distant Eastern countries at entertainment value. Short-wave listeners in such places are certain to enjoy better reception when the power is increased early next year. E. C. J.

INTERRUPTIONS IN SHORT-WAVE COMMUNICATION

(*Continued from page 9*)

exactly the same time as a certain eruption was seen to occur on the sun's surface. This further suggests that the terrestrial effects were due to a burst of ultra-violet light which travelled from the sun to the earth in the same time (eight minutes) as the red light used for the spectroheliograph photographs which showed up the bright eruptions. We should, of course, expect the influence of an ultra-violet light burst to be noticed only on the illuminated side of the earth and, as has already been mentioned, Dr. Dellinger has reported that these radio "fade-outs" are only noticed on the day-time hemisphere.

I should sympathise with a cautious reader who feels that the events of a single day are not a sufficient basis for a definite conclusion, for it seems to me clear that more examples of the correlation of bright eruptions and solar "fade-outs" are required before we can be quite certain that one is the cause of the other. In this connexion it may be noted that many bright eruptions have occurred which do not appear to have caused wireless "fade-outs;" while "fade-outs" have occurred which have not been connected with solar events. All we can say is that the subject appears well worth continued investigation, and it is in this connexion that readers of this journal may find a subject for observation.

It would, of course, be very remarkable if some disturbance occurred in the sun every *second* rotation, and it seems to me very necessary to make quite sure that nothing is missed after the first rotation, which occurs in twenty-seven days. To assist readers who care to make a note of any "fade-outs" they experience, I may point out that there were two series of "fade-outs" noticed in the earlier part of the present year, which we may for convenience call the A series and the B series. The A series occurred on February 14 and April 8, and so, if we assume a fifty-four day spacing, would run afterwards June 1, July 25, September 17, and November 10, etc. I have not yet heard of any results obtained after April 8 in regard to this series. The B series, which do not appear to be so severe in their effects, were noted on February 8, April 1, and May 25, and so would run afterwards: July 18, September 10, November 3, etc. As I have already mentioned, it would be worth while making special observations at periods midway between these dates as well as round about the dates themselves.

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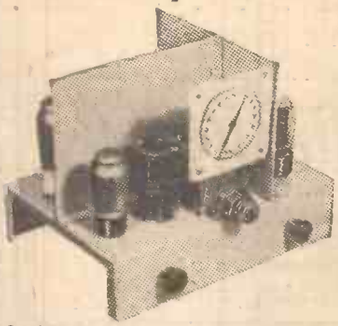

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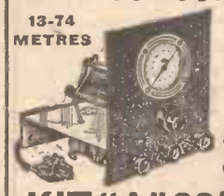

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Problems in S.W. Receiver Design

By E. J. ALWAY

NOT very long ago, short-wave receivers were built more or less by rule of thumb and, in many cases, gave surprisingly good results. Recently, however, great progress has been made in receiver design, and both straight and superheterodyne short-wave receivers have improved accordingly.

Generally speaking, the directions in which the chief advances have been made may be indicated by three main headings — namely, (1) sensitivity, (2) selectivity, (3) simplicity of operation. Naturally, various problems have arisen in these three main groups, and it is the object of this article to explain what has been done so far and what further progress may be expected in the near future.

Increasing Sensitivity

The question of increased sensitivity is being met in two different ways. The first and most obvious, of course, is the use of additional valves and tuned circuits to the H.F. stages of straight receivers and to the H.F. and I.F. stages of superhet. receivers. In fact, it is now very unusual to find a superhet. receiver, in any but the cheapest class, which does not possess a reasonably efficient H.F. stage preceding the frequency-changer. The H.F. stage is generally operative on all wavebands, although in some receivers it is brought into use only on the short waves, where there is more need of extra amplification.

An initial H.F. stage also fulfils other functions, such as providing greater "image signal" rejection, but the additional gain which it provides is very useful on the short waves, where the field strengths of stations are generally of the order of micro-volts instead of milli-volts as on the medium-wave and long-wave bands.

Recently, in both straight and superhet. receivers of the "all-wave" type, the initial H.F. stage has also been made more efficient by the adoption of a new type tuning condenser having lower maximum and lower minimum capacities than have been employed hitherto. They have a maximum capacity of only 0.00036 μF and are often constructed with insulators of low-loss ceramic materials in place of the familiar bakelite and similar materials whose dielectric loss is often too high for good results on the very high frequencies. A synthetic resin material produced recently, however, shows quite low losses even when used on wavelengths of the order of 5 metres. This particular synthetic "resin" and the ceramic or porcelain-like materials are finding more and more uses on the short waves—in the shape of coil formers and other similar products. Ebonite, of course, has good dielectric properties, but is not stable, and is unsuitable for export because of its tendency to absorb moisture and to soften in high temperatures.

Coils of higher inductance value than formerly are now wound on special bakelite or extruded ceramic formers and, in conjunction with the new low-capacity tuning condensers, these circuits can be made to have higher "Q" or "goodness" values than would have been commercially possible a year ago. Some of the most modern of these coils, too, are wound round a specially prepared iron core, since recent advances in this sphere have shown the use of powdered-iron or "dust" cores to be beneficial on wavelengths down to even 20 metres.

A modern iron-cored short-wave coil may not show a marked gain when compared to a similar air-cored coil, but a marked difference will be found in the resonance curve (see Fig. 1), the iron-core coil having a much steeper resonance peak.

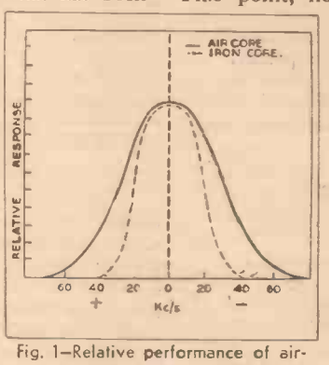


Fig. 1—Relative performance of air-core and iron-core coils

Selectivity

This point, however, really comes under the heading of selectivity—one of the major problems of the straight short-wave receiver, for which there is still hope, in spite of the congested nature of the short-wave broadcasting and amateur bands, provided coils of really high "Q" value can be used, and if the L/C (inductance-capacity) ratio is chosen not so much for high gain (*i.e.*, large inductance and very small capacity) but rather for optimum selectivity. This may be done by choosing a fairly large tuning condenser in preference to one of, say, only 40 $\mu\mu$F capacity, without much sacrifice in gain. Alternatively, a further valve stage may be added, with consequent increase in both sensitivity and selectivity.

An additional tuning circuit, when used, may—as a refinement and if the stages are well screened—have its own "reaction" valve (a triode with reaction coil, or possibly a dynatron) connected solely for the purpose of reducing losses and so improving the selectivity.

Extreme selectivity, of course, still calls for the use of a superheterodyne receiver, and has in many cases been achieved by the use of crystal filters (in connexion with the I.F. amplifier) which may be switched in and out of circuit as desired. At present, when such a filter is in operation, the receiver is not really suitable for the reception of telephony, but band-pass crystal filters are rapidly being developed and many listeners are now familiar with the variable-selectivity superheterodyne—whose intermediate-frequency bandwidth may be varied mechanically by means of a knob on the panel so as to take care of different signal strengths and interference conditions. The selectivity may thus be varied at will to suit the particular station tuned in, the variation being most commonly accomplished by decreasing or increasing the distance (and, therefore, the

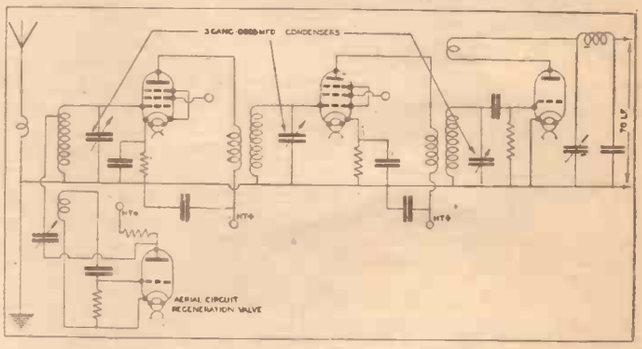


Fig. 2—"High-selectivity" straight receiver

(*Continued at foot of col. 1 on opposite page*).

On Holiday with a Portable S.-W. Set

It is proposed to describe a short-wave portable receiver which was used recently whilst on holiday at various places. Considering that it is only a "one-valver" and that two pairs of headphones were used, some exceedingly good results were obtained, especially on Salisbury Plain, on high cliffs overlooking the sea at Seaton, Devon, and on the Yorkshire moors. All continents were heard, the items including news and talks in English from America, Iceland, Germany, France, Holland, and the Empire programme from GSB.

The Receiver

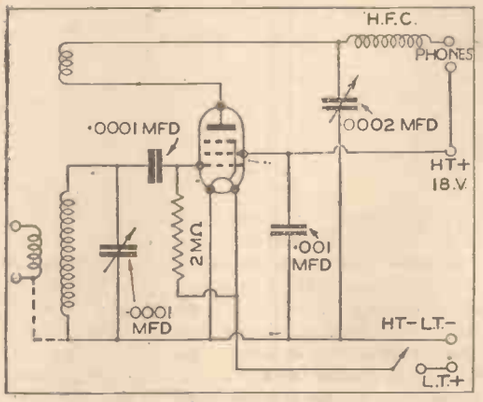
The main requirements of the set were that it should have no accumulator and only a small high-tension battery, and the circuit shown fulfils these conditions. The valve is an ordinary two-volt output pentode, which oscillates easily with 18 volts high-tension supply and a filament battery of 1½ volts. Two small grid-bias batteries were used for the H.T. supply, and a gas-lighter dry cell for the L.T. As a matter of fact, some pentodes will oscillate with only 9 volts H.T., and thus it will be seen that the main drawback to portable sets—the weight of the batteries—is overcome. The whole set, complete with batteries, plug-in coils, two pairs of 'phones and aerial wire, fits into a case 13in. x 7in. x 3½in.

It is suggested that if a similar set is being constructed, condensers fitted with good slow-motion dials should be used for tuning and reaction. The components should also be mounted on a metal chassis in order to avoid hand-capacity effects. Two-pin plug-in coils were used in the original set, but, of course, four-pin coils could be employed with a proportionate saving of space. The remaining components came from the junk-box, so that the total cost of the receiver was only a few shillings.

The aerial consisted of a length of flex, which at first was slung over a branch of a convenient tree. This, however, was inclined to sway in the wind and cause difficulty in tuning, and it was found better to stretch out the wire on the ground, there being scarcely any reduction in signal strength.

Results Obtained

Now as to stations received. On the 19 m. band—W2XAD, W2XE, DJQ, W8XK, Prague, and JVH; 25 m.—TFJ, RNE, 2RO, SM5SX (a new Swedish station), and JVM; 30 m.—



Circuit arrangement of receiver

ORK, PCJ, CT1AA, LRX, VK3LR, W2XAF, DJA, DJN, GSB, and LKJ1. Rio de Janeiro, PRF5, was received at about R3 on this band and the carrier-wave of Sydney could just be heard one morning. Several distant amateurs were tuned in on the 20 m. band and a few local amateurs on 40 metres.

C. R. G.

PROBLEMS IN S.W. RECEIVER DESIGN

(Continued from opposite page)

electromagnetic coupling) between the primary and secondary coils of one or more of the I.F. transformers in the receiver.

Simplifying Operation

The limiting condition as far as simplicity of operation is concerned has probably been reached by one commercial firm, whose receiver has practically all its operations controlled by one knob—tuning, volume, tone control, and the variable selectivity device all being connected up to the one operating position. Such simplicity as this is not likely to be obtained in amateur receivers for some time, but nearly every home-made and some commercial receivers are fitted with that very handy device—a band-spread condenser—which does much to facilitate the tuning-in of elusive short-wave stations.

New tuning devices such as the "Magic Eye" and "Mystic Eye" have also become popular, since they are inexpensive, quick, and reliable in operation and may, apparently, be fitted to straight receivers not possessing A.V.C. systems.

All receivers possessing a grid-leak detector, however, have in them the rudiments of an A.V.C. system, although the voltage generated across the grid-leak may not be fed back to variable-mu H.F. stages, but only *viâ* the anode circuit of the valve to a pair of headphones. This A.V.C. voltage, though often small, may be used to work the miniature cathode-ray tube on reasonably strong stations to give some indication of signal strength, since additional amplification will be provided by the valve amplifier in the device itself.

Finally, the advent of low-loss ganged wave-change switches has simplified or rendered unnecessary constant coil changing, and recent developments point to rotary assemblies of individual coils becoming popular. Wave-band switching of this latter type is, of course, used in many commercial (professional) receivers—for example, the short-wave relaying receivers installed at the BBC receiving station at Tatsfield.

INTERNATIONAL SHORT-WAVE CLUB

The London Chapter of the I.S.W.C. meets on Fridays (except the second Friday of the month) in the R.A.C.S. Hall, Cavendish Grove, Wandsworth, for lectures, demonstrations, and discussions upon short-wave matters. We are asked to state that any readers of World-Radio who care to attend will be welcomed.

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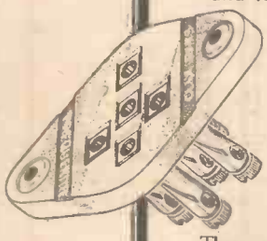

Illustration shows Clix new Floating type *SHORT WAVE VALVEHOLDER* with low-loss frequentite base.

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Guide to Selection of All-Wave Receivers

AERODYNE RADIO, LTD.

Model 49, 3-valve "All-wave" battery receiver, iron-cored coils, 13-50 m., 200-500 m., 800-2,000 m., 7 gns. (less batteries); Model 51, 3-valve "All-wave" battery receiver, band-pass tuning, 16.5-50 m., 200-550 m., 800-2,000 m., 8 gns. (less batteries); Models 52 and 55, 3-valve "All-wave" A.C. receiver, 16.5-50 m., 200-550 m., 800-2,000 m., band-pass tuning, 3 watts output, 9 gns.; Universal A.C./D.C. Model (No. 55), 9½ gns.; Model 54, 6-valve "All-wave" A.C. Superhet, illuminated station indicator, delayed A.V.C., 3 watts output, 13 gns.; Model 60, 4-valve A.C. "All-wave" Radiogram, 18 gns.; A.C./D.C. model, 19½ gns.

BALCOMBE, A. J., LTD.

Alba Model 870, 4-v. superhet, iron-cored coils, A.V.C., 3½ watts output, S.W. range, 16.8-50 m., 11 gns.; A.C./D.C. Model, 12 gns.; Model 850, 8-stage A.C. superhet, 3½ watts output, S.W. range 19.5-50 m., 14 gns.; A.C./D.C. Model, 15 gns.; Radiogram Model 970, 22 gns.

BURGOYNE WIRELESS LIMITED

5v. A.C. all-wave superhet, Q.A.V.C., tone control, 2½ watts output, 14 gns. (radiogram 22 gns.); 4-v. T.R.F. receiver, iron-cored coils, 2½ watts output, S.W. range 19-51 m., 9½ gns.; radiogram 17 gns. All-wave 3-v. portable, 8 gns.

BURNDEPT, LTD.

Model 252, 3-v. band-pass A.C./D.C. receiver, wavelengths 13.5-48.5 m., 48-145 m., 190-550 m., 900-2,000 m., 9 gns.; Model 251, 3-v. band-pass battery receiver, £7 19s. 6d.

CITY ACCUMULATOR CO., LTD.

4-v. A.C. superhet, waverange 10-2,000 m., in four wavebands, 16 gns.

COLE, E. K., LTD.

A.W. 87, 8-stage A.C. superhet, four S.W. bands (19-50 m.), A.V.C., tone control, 12 gns.

COSSOR, A. C., LTD.

Model 837, 6-v. superhet all-wave radiogram, S.W. ranges 13-40 m., 38-100 m., price 22 gns., A.V.C. and tone control; Model 3733 receives standard wavelengths on the usual straight circuit and short waves (17.25-52.5 m.) on superhet, £7 15s. od. (ex. batts.). An A.C. version, Model 3783, is available at £9 15s. od.

DECCA GRAMOPHONE CO., LTD.

Model 520, 6-v. (incl. rectifier), A.C. superhet, A.V.C., 3½ watts output, S.W. range 16-49 m., 12½ gns.; Model 530G radiogram, 22 gns.; Model 540CG auto-radiogram, 29 gns.

EVER READY CO. (GREAT BRITAIN) LTD.

Model 5011, 6-v. (incl. rectifier) A.C. superhet, wavelengths 13-33 m., 30-82 m., 198-556 m., and 900-2,000 m., visual tuning, 18 gns. Model 5013, 4-v. (incl. rectifier) A.C./D.C. receiver, S.W. range 18.5-54 m., 9½ gns. Model 5015, 3-v. straight receiver, S.W. range 18.2-52 m., 8½ gns. (incl. batteries.)

FERRANTI LTD.

Parva, 3-v. receiver, S.W. range 19-51 m., A.C. model, 9 gns.; A.C./D.C. model, 9½ gns.; A.C. console, 13 gns.; *Nova*, 7-stage superhet, A.V.C., "magnascopic" dial, A.C. model, 12 gns.; A.C./D.C. model, 13 gns.; *Magna*, 7-stage superhet, A.V.C., "magnascopic" dial, electric tuning, A.C. model, 12½ gns.; A.C./D.C. model, 13½ gns.; *Arcadia*, 8-stage A.C. superhet, variable selectivity, high fidelity, noise suppression, "magnascopic" dial, table model, 15 gns.; console, 18 gns; radiogram, 26 gns.

GENERAL ELECTRIC CO. LTD.

Universal S.W. 4, 4-v. A.C./D.C. superhet, S.W. range, 16-50 m., A.V.C., tone control, 12½ gns. Fidelity S.W.5, 5-v. A.C. superhet, S.W. range 16-50 m., variable selectivity, A.V.C. noise suppression, tone control, 3 watts output, 15½ gns.; Fidelity All-Wave, 8-v. A.C. superhet, S.W. range 16-98 m., A.V.C., 6-watt push-pull output, 25 gns.; Radiogram, 8-v., 44 gns.

HACKER, H. & SONS

Valkyrie, 7-v. straight circuit, iron-cored coils, neon tuner, variable selectivity, 26 gns. *Vulcan*, 8-v. circuit, variable selectivity, neon tuner, 36 gns.; *Ether Empress*, 16-v. radiogram, 120 gns.

HIS MASTER'S VOICE

Model 480, 5v. A.C. superhet, wavelengths 16.7-53 m., 46-140 m., 185-560 m., and 750-2,200 m., tone controls, 3 watts output, 17½ gns. Model 481, as Model 480, but including wavelengths 7-16 m., 18½ gns.; Model 482, 6-v. A.C. superhet, fluid-light tuning, tone control, wavelengths 16.5-51.5 m., 200-580 m., and 725-2,000 m., 16 gns.; Model 486, 4-v. A.C./D.C. superhet, A.V.C. tone control, 1.2 watts output, S.W. range 16-50 m., 13½ gns.; Model 491, 5-v. A.C. superhet, A.V.C., tone control, 2 watts output, 13½ gns.; Model 149, 3-v. battery receiver, T.R.F. circuit, S.W. range 18-50 m., 9½ gns. (incl. batteries); Model 800, high-fidelity 15-v. all-wave radiogram, 110 gns.; Model 801, 8-v. A.C superhet, A.V.C., fluid light tuning, 3 loudspeakers, 8-record auto changer, tone controls, electric clock, 10 watts output, wavelengths 7-17 m., 16.7-53 m., 46-140 m., 185-560 m., and 750-2,200 m., 80 gns.; Model 581, 5-v. A.C. superhet, 8-record auto radiogram, tone controls, wavelengths as Model 801, 3 watts output, 48 gns.; Model 485a, 5-v. A.C. radiogram, wavelengths as Model 801, auto record changer, 36 gns.; Model 488, 5-v. A.C. radiogram, wavelengths as Model 801, 28 gns.

For the benefit of new readers, and to meet the requirements of others who still desire the information, we reprint details of all-wave receivers as given in our Radio Exhibition Number of August 28, together with certain corrections and additions covering changes made since that date. Enquiries addressed to this office will be forwarded to the manufacturers concerned.

INVICTA RADIO LTD.

Model C.W.3B, 3-v. A.C. straight receiver, S.W. range 17-51 m., 9 gns.; Model A.W. 57, 5-v. A.C. superhet, wavelengths 13-27 m., 25-75 m., 75-200 m., 200-550 m., and 850-2,000 m., 14 gns.; A.W. 47RG, radiogram, 22 gns.; Model C.W.3B, 3-v. straight battery set (17-51 m.), £8 2s. 6d. (incl. batteries).

KOLSTER-BRANDES LTD.

Model K.B. 515, 3-v. A.C. straight receiver, S.W. range 19-50 m., 9½ gns.; Model K.B. 525, A.C./D.C. version of K.B. 515, 9½ gns.; Model K.B. 560, 4-v. A.C. superhet, iron-cored coils, A.V.C., visual tuning, S.W. range 19-52 m., 3 watts output, 16 gns.; Model K.B. 535, 3-v. straight battery receiver, S.W. range 19-50 m., 8½ gns.

LISSEN LTD.

Model 8114 5-v. A.C. superhet, neon tuning, variable selectivity, noise suppression, S.W. ranges 13-33 m., and 29-82 m., 17 gns.; Model 8130, 3-v., A.C./D.C. straight receiver, tone control, S.W. range, 18-54 m., 9 gns.; Model 8165, 3-v., straight battery receiver, S.W. range 18-54 m., 8 gns. (incl. batteries).

MARCONIPHONE CO., LTD.

Model 346, 6-v. A.C. superhet, A.V.C., tone controls, 3 watts output, S.W. range 7-141 m., 18½ gns.; Model 345, 6-v. A.C. superhet, as Model 346, but S.W. range 16.5-51.5 m.; Model 534, 6-v. A.C. superhet, A.V.C., tone controls, "Thaumoscope" visual tuning, 3 watts output, 16 gns.; Model 382, 4-v., A.C./D.C. superhet, A.V.C., tone controls, mains filter, voltage regulator, S.W. range 16-50 m., 2 watts output, 13½ gns.; Model 556, 5-v., A.C. superhet. A.V.C., tone control, mains aerial, 2 watts output, 13½ gns.; Model 375, 3-v. T.R.F. receiver, 9½ gns.; Models 365 and 366, 6-v. all-wave A.C. radiograms, A.V.C. tone controls, auto record changer, 3 watts output, wavelengths 7-16 m., 16.5-51 m., 46-140 m., 185-560 m., and 750-2,250 m., 36 gns.; Model 363, 6-v. all-wave A.C. radiogram, details as Model 365, ex. record changer, 28 gns.; Model 249, 5-v. A.C. radiogram, 29 gns.; Model 239, 5-v. A.C. radiogram, 22 gns.

McMICHAEL RADIO, LTD.

Model 362, 4-v. A.C. superhet, A.V.C., 2 watts output, S.W. range 18.6-51 m., 15½ gns.

MILNES RADIO CO., LTD.

Pearl, 5-v. A.C. superhet, 4 wave-ranges, A.V.C. table model, £17 17s. od.; console, £20 17s. od.; Diamond, 7-v. superhet, 4 wave-ranges, A.V.C., table Model, £16 16s. od.; console, £19 16s. od.

PHILIPS LAMPS, LTD.

Model 745A, 4-v. A.C. superhet, Adaptovisor dial, tuning silencer, 12 gns.; Model 745U, similar to 745A, but D.C./A.C., 13 gns.; Model 797A, 5-v. A.C. superhet, Adaptovisor dial, audioscopic reproduction, tuning silencer, 14½ gns.; Model 797U, similar to 797A, but D.C./A.C., 15½ gns.; Model 795A, 5-v. A.C. superhet, audioscopic reproduction, Adaptovisor dial, visual tuning, 18 gns.; 795U, similar to 795A, but D.C./A.C., 19 gns.; Model 790A, 5-v. A.C. superhet console, 20 gns.; Model 790U, similar to 790A, but D.C./A.C., 21 gns.; Model 714B, 5-v. superhet with Adaptovisor dial and tuning silencer (incl. batteries), 14 gns.; Model 791A, 5-v. radiogram, 29 gns.; Model 792A, 5-v. auto-radiogram, 38 gns.

PYE RADIO, LTD.

"Empire" Model, 10-v. (incl. rectifier), A.C. console superhet, visual tuning, A.V.C., variable selectivity, tone control, noise suppression, S.W. ranges 13-33 m., 30-82 m., 6 watts output, 33 gns.; Model T.10, 6-v. (incl. rectifier), A.C. superhet, neon tuning, variable selectivity, sensitivity and tone controls, 2.5 watts output, wave-range as "Empire" model, 18 gns.; Model T.10A, 5-v. (incl. rectifier), A.C. superhet, waverange as "Empire" model, 16 gns.

RADIO GRAMOPHONE DEVELOPMENT CO., LTD.

Model 625, 6-v. A.C. superhet, 4 wavebands (16-2,000 m.), variable selectivity, neon tuning, noise suppression, tone control, 3 watts output, 25 gns.; Model 630, a console version of Model 625, 30 gns.; Model 645, 6-v. (incl. rectifier), all-wave A.C. radiogram, 4 wavebands (16-2,000 m.), variable selectivity, neon tuning, noise suppression, tone control, 3 watts output, auto changer, 45 gns. Model 660, 6-v. (incl. rectifier) all-wave A.C. radiogram, variable selectivity, cathode-ray, tuning, 3½ watts output, 60 gns.; Model 880 radio equipment similar to Model 660, but including push-pull 6-watt amplifier, 80 gns.; Model 1220, 12-v. all-wave, A.C. radiogram, 12 watts push-pull amplifier, 120 gns.

SELF-CHANGING GRAMOPHONES, LTD.

Autotype, high-fidelity, automatic A.C. radiogram with 5-v. superhet radio circuit and 15-watts paraphase-type amplifier, Q.A.V.C., variable selectivity, all-wave model, 165 gns.

STRATTON & CO., LTD.

6-v. superhet battery receiver, interchangeable inductance units for medium and long-wave reception, A.V.C. and variable amplification, £27 10s. od. The Eddystone "All-World Two," with special slow-motion band-spread tuning unit. This receiver is sold as a constructors' kit at 67s. 6d.

ULTRA ELECTRIC, LTD.

"Ultra 47" 6-v. (incl. rectifier), A.C. superhet, A.V.C., sensitivity and tone controls, S.W. ranges 13-35 m., and 30-80 m., 17 gns.; "Ultra 48" 5-v. A.C. superhet, A.V.C., S.W. range 16.8-50 m., 13 gns.

UNION RADIO CO., LTD.

Unirad all-wave receivers with 4-band tuning, the waveranges covering 12.5-28 m., 27-81 m., 235-550 m., and 950-1,925 m. (or, alternatively, 12.5-28 m., 27-81 m., 80-235 m., and 235-550 m.), A.V.C. and tone control are provided. The output of the mains-driven sets is 3.5 watts, and of the battery sets 1½ watts. Price £29.

VIDOR LTD.

Model 253, 3-v. band-pass circuit, moving-coil loudspeaker, waverange 13.5-2,000 m., £7 19s. 6d. (incl. batteries); Model 254, 3-v. A.C./D.C., 9 gns.; Model 237, 5-v. A.C. radiogram, A.V.C., 3½ watts output, 18 gns.

PILOT RADIO, LTD.

Model U.355, 5-v. superhet, A.V.C., tone control, S.W. range, 16-53 m., 3-watts output, 12 gns.; Model U.225, A.C./D.C., 6-v. superhet, 14 gns.; Model CU.225, 5-v. A.C., console receiver, 17 gns.; (A.C./D.C. model, 19 gns.); Model U.650, 6-v. A.C. superhet, 16 gns.; U.690, 6-v. D.C. superhet, 17 gns.; CU.650, 6-v. A.C. console superhet (16-52 m., 48-150 m., 175-550 m., and 750-2,100 m.), 23 gns.; CU.690—a D.C. version of CU650, 24 gns.

Reference Data for the Short-Wave Listener

INTERNATIONAL MORSE CODE SIGNALS

Letters :

a	· —
ä	· — · —
á or à	· — — · —
b	— · · ·
c	— · — ·
ch	— — — —
d	— · ·
e	·
é	· · — · ·
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g	— — ·
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Figures :

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8	— — — · ·
9	— — — — ·
0	— — — — —

Punctuation and other Signs:

Commencing Signal (to precede every transmission)	— · — · —
Full stop	· · · · · ·
Note of interrogation, or request for repetition	· · — — · ·
Double dash (signal separating address from text, and text from signature)	— · · · —
Understood	· · · — ·
Error	· · · · · · · ·
Invitation to transmit, "Go ahead"	— · —
Wait	· — · · ·
End of transmission	· — · — ·
End of Work	· · · — · —

LIST OF WIRELESS ABREVIATIONS

ABBREVIATIONS—sometimes known as the "Q Code"—are used extensively by commercial and experimental stations. We give below a *few of those most frequently heard, together with their meanings. When an abbreviation is intended as a question, it is followed by the note of interrogation.

Abbreviation	*Question*	*Answer*
QRA	What is the name of your station?	The name of my station is . . .
QRB	How far are you from my station?	The distance between our stations is . . .
QRD	Where are you bound and where are you from?	I am bound for . . . from . . .
QRG	Will you tell me my exact frequency?	Your exact frequency is . . . kc/s.
QRH	Does my frequency vary?	Your frequency varies.
QRM	Are you experiencing interference?	I am experiencing interference.
QRN	Are you troubled by atmospherics?	I am troubled by atmospherics.
QRT	Shall I stop sending?	Stop sending.
QSA	What is the strength of my signal (R_1 to R_5)?	The strength of your signals is R . . .
QSB	Does the strength of my signals vary?	The strength of your signals varies.
QSX	Will you listen for . . . (*call sign*) on . . . kc/s?	I am listening for . . . (*call sign*) on . . . kc/s.
QTE	What is my true bearing in relation to you?	Your true bearing in relation to me is . . . degrees; or
	What is my true bearing in relation to . . . (*call sign*)?	Your true bearing in relation to . . . (*call sign*) is . . . degrees . . . at . . . (*time*).
QTF	Will you give me the position of my station (by D.F.)?	The position of your station (by D.F.) is . . . latitude . . . longitude.
QTR	What is the exact time?	The exact time is . . .

*A full list of abbreviations will be found in the *Handbook for Wireless Telegraph Operators*, published by H.M. Stationery Office, price 9d. net.

TABLE OF DISTRIBUTION OF CALL-SIGNS

(*From the List published by the Bureau de l'Union Internationale des Télécommunications, Berne*).

Countries	*Call-signs*
Chile	CAA—CEZ
Canada	CFA—CKZ
Cuba	CLA—CMZ
Morocco	CNA—CNZ
Cuba	COA—COZ
Bolivia	CPA—CPZ
Portuguese Colonies	CQA—CRZ
Portugal	CSA—CUZ
Uruguay	CVA—CXZ
Canada	CYA—CZZ
Germany	D
Spain	EAA—EHZ
Irish Free State	EIA—EIZ
Republic of Liberia	ELA—ELZ
Iran	EPA—EQZ
Estonia	ESA—ESZ
Ethiopia	ETA—ETZ
Germany	EZA—EZZ *
France and Colonies and Protectorates	F
Great Britain	G
Hungary	HAA—HAZ
Swiss Confederation	HBA—HBZ
Ecuador	HCA—HCZ
Republic of Hayti	HHA—HHZ
Dominican Republic	HIA—HIZ
Republic of Colombia	HJA—HKZ
Republic of Panama	HPA—HPZ
Republic of Honduras	HRA—HRZ
Siam	HSA—HSZ
Vatican City (State of the)	HVA—HVZ
Saudi Arabia	HZA—HZZ

* Provisionally.

Countries	*Call-signs*
Italy and Colonies	I
Japan	J
United States of America	K
Norway	LAA—LNZ
Argentine Republic	LOA—LWZ
Luxembourg	LXA—LXZ
Lithuania	LYA—LYZ
Bulgaria	LZA—LZZ
Great Britain	M
United States of America	N
Peru	OAA—OCZ
Austria	OEA—OEZ
Finland	OFA—OHZ OIA—OJZ*
Czechoslovakia	OKA—OKZ OLA—OLZ*
Belgium and Colonies	ONA—OTZ
Denmark	OUA—OZZ
Netherlands	PAA—PIZ
Curaçao	PJA—PJZ
Dutch East Indies	PKA—POZ
Brazil	PPA—PYZ
Surinam	PZA—PZZ
(Abbreviations)	Q
USSR	R
Sweden	SAA—SMZ
Poland	SOA—SRZ
Egypt	SSA—SSZ* STA—SUZ
Greece	SVA—SZZ
Turkey	TAA—TCZ
Iceland	TFA—TFZ
Guatemala	TGA—TGZ

Countries	*Call-signs*
Costa Rica	TIA—TIZ
France and Colonies and Protectorates	TKA—TZZ
USSR	U
Canada	VAA—VGZ
Commonwealth of Australia	VHA—VMZ
Newfoundland	VOA—VOZ
British Colonies and Protectorates	VPA—VSZ
British India	VTA—VWZ
Canada	VXA—VYZ
United States of America	W
Mexico	XAA—XFZ
China	XGA—XUZ
British India	XYA—XZZ
Afghanistan	YAA—YAZ
Dutch East Indies	YBA—YHZ
Iraq	YIA—YIZ
New Hebrides	YJA—YJZ
Latvia	YLA—YLZ
Free City of Danzig	YMA—YMZ
Nicaragua	YNA—YNZ
Romania	YOA—YRZ
Republic of El Salvador	YSA—YSZ
Yugoslavia	YTA—YUZ
Venezuela	YVA—YWZ
Albania	ZAA—ZAZ
British Colonies and Protectorates	ZBA—ZJZ
New Zealand	ZKA—ZMZ
Paraguay	ZPA—ZPZ
Union of South Africa	ZSA—ZUZ
Brazil	ZVA—ZZZ*

Short-Wave News Reel

Siam's Royal Orchestra

On Monday, October 19, for the greater part of half-an-hour, I listened to a short-wave relay from the National Broadcasting Station at Bangkok, featuring the Royal Military and Naval Orchestra of Siam in a programme of Siamese music. In my log of this broadcast I read that much of the music appeared to be western in character, but that occasional interludes included native singing with a corresponding accompaniment on instruments of eastern origin. The relay was concluded at 13.26 (G.M.T.), when I heard the station's interval signal —the musical notes : *Soh-doh-me-doh-me-soh-me.* Then followed the call in Siamese, English, and French, as follows : " Short-wave station HS8PJ, at Bangkok, on a frequency of 19.02 megacycles, or a wavelength of 15.77 metres."

The speaker, in very good English, then announced that the next part of the programme would consist of a gramophone recital of popular tunes. I heard two spirited numbers from the film : " Follow the Fleet ; " they were : " I would rather lead a Band " and " Let Yourself Go," both played by Ambrose and his Orchestra. The next number was " Gold and Silver Waltz," played by Sidney Kyte and his band, followed by other recent dance hits.

It was with regret that I had to " switch off " this broadcast which was received at good loudspeaker strength throughout.

Barnsley, Yorks. R. H. G.

Pan-American Air Liner

Once again W2XAF introduced their listeners to something thrilling and original. To be taken on board the giant amphibian of the Pan-American Airline, and be present, as it were, at the start of the first commercial passenger flight from San Francisco across the Pacific, was my good fortune, at 22.40 (G.M.T.) on Wednesday, October 21.

The commentator, walking through the many luxurious cabins of this 26-ton " monster of the air," gave a graphic description of all he saw. The hull, he said, was 91 feet long and all furniture and fittings were of duralumin for strength and lightness. The chief navigator was interviewed, and also several of the passengers, some of whom had held tickets for the flight for nearly two years ! Going forward, we were " shown " the dashboard containing no less than 325 instruments—" all in working order " being the dry comment. For six minutes the four mighty engines were heard warming up for their long journey, which, it was hoped, would be completed in eighteen hours. We were promised a relay from the destination, Honolulu, when they arrived there at 12 noon (E.S.T.), the next day. A cry, " Cast off," and " Hawaiian Clipper No. 57 " roared away and up into the blue. . . . . " She's away " !

Dorchester. L. J. Le B.

Hawaiian Guitars

Having read in World-Radio of October 2 that a short-wave station in Hawaii had been heard on 25.68 m., I decided to attempt reception of this station on Tuesday, October 20. Turning to the 25 m. band at 04.40, I discovered a transmission on a wavelength just above that of TPA4, which certainly sounded promising, for the programme consisted of the delightful guitar music for which Hawaii is famous. For twenty minutes I listened to this very pleasant entertainment, which also included vocal items, until at 05.00, I heard the announcement, " You have been listening to station KIO, Kahuku, Hawaii."

After further concluding remarks, which, unfortunately were blotted out by an interfering morse transmission, KIO closed down.

Yate, Glos. F. J. R.

* * *

TO NEW READERS : Contributions submitted for our Short-Wave News Reel must refer to interesting events or items broadcast on the short waves. A mere record of reception from several stations is not suitable. Contributions—approximately 200 words in length—should be clearly marked " Short-Wave News Reel." and must reach us by first post each Monday for use in the following Friday's issue. Half-a-guinea is paid for each item published.

Below 100 Metres

By " METROPOLITAN "

(*October 19-25*)

Reception conditions during the beginning of the week were rather variable, especially on wavelengths below 20 metres. The 19 m. U.S. transmitters, for instance, were very much weaker than of late, and W3XAL (16.87 m.) was seldom heard above R3-4. The most reliable U.S. channels have been provided by W2XAF and W1XK. Incidentally, W3XAU (31.28 m.) has resumed operations with increased power and has been heard several times this week.

OLR, Podebrady, on 19.58 m., was R7 at 17.15 on Monday. The U.S. 19 m. transmitters were weak at this time and only W2XAD could be heard at about R3. W2XAF was heard fairly well (R7) at 22.20 ; EAQ was R8, while DJA and DJN were also strong. PRF5 and LSX were both R7 at 23.20, W1XK (R8) being the best of the Americans. Conditions on the 25 m. and 49 m. bands were poor.

W2XAD was only an R5 signal during the early evening of Wednesday, and the carrier only of W8XK was heard. Better conditions prevailed later and the 31 m. band provided the optimum signals, W2XAF and W1XK both being R7, with W2XE (25.36 m.) a steady R5. LKJ1, DJL, DJB, and DJE were all R8 at 12.30 on Thursday, and W2XE (13.94 m.) was intelligible (R5 with shallow fades) at intervals. During the late evening, W2XAF was R8 on peaks, with deep fading. W1XK was also good, but had a rather noisy carrier. VP3BG at Georgetown on approximately 49 metres was R6 at 23.35, and the South Americans in the 31 m. and 49 m. bands were very well received. CT1AA (31.07 m.) and CSW (31.41 m.)—both at Lisbon—were both R9 at 23.50, and so was Moscow RAN (31.25 m.).

W2XE (13.94 m.) was well heard during the afternoon of Friday. An improvement in the strength of W3XAL (16.87 m.) was noticed at 20.45, at which time W2XAD was R6. W2XAF was R7 at 21.45 but, as usual, was seriously affected by another station on about the same frequency. Fairly good conditions prevailed on Saturday, the higher frequencies being better received than of late. Conditions in the 31 m. band during the late evening were not as good as experienced during the early part of the week, W2XAF being only R4-5, with some " fluttering." PMN was well heard on Sunday at 15.15, being an extremely steady R7 signal. W2XAD was fair at 18.20 and TFJ (Reykjavik) at R7 was heard well at 18.50. DJD was very strong at 19.00, so also was OLR (25.51 m.). W2XAF was very well heard at 23.00.

Test Match Broadcasts

The Australian Broadcasting Commission advises us that during the Australian Tour of the English Test Team, 1936-7, a special programme of one hour's duration is to be presented nightly from the Australian short-wave station, VK3LR on 31.32 m., beginning on Friday, October 16.

The hour chosen for this special transmission is 23.45 to 00.45 Australian Eastern Standard Time, the time in England being 13.45 to 14.45 (G.M.T.) the same day. The time was selected after reference had been made to reception charts supplied to the Postmaster-General's Department in Australia by the BBC. This special programme has, for easy reference, been called " Programme D," and will be transmitted from a horizontal rhombic aerial directed on London. Reports on reception will be appreciated by the Australian Broadcasting Commission, whose address in Victoria is Box 1586, G.P.O. Melbourne, Australia.

Identification of VK3LR—as far as Programme D is concerned—will be facilitated by (*a*) the present identification signal, the call of the Australian Lyre Bird, which is broadcast prior to the opening of the programme, (*b*) by the inclusion of the midnight chiming of the Melbourne Central Post Office clock, and (*c*) by frequent announcements.

Other programmes radiated by short-wave station VK3LR are : Programme " A," 08.30-10.00 ; Programme " B," 10.00-12.30, 12.50-13.30 ; Programme " C," 12.30-12.50.

U.S.A. Presidential Election

To assist in world-wide broadcasting of election results on Tuesday, November 3, short-wave stations W2XAD and W2XAF will operate throughout the day from 08.00 to midnight, at which time it is expected there will be no question as to who is elected president. W2XAD, operating on a frequency of 15.33 Mc/s (19.57 m.), will use its European beam for this transmission, while W2XAF, on 9.53 Mc/s (31.48 m.) will use its regular aerial.

Short-Wave Reporting

For the information of new readers we give below particulars of the abbreviations to be used when submitting short-wave reports.

Table of Signal Strengths

R1—Just audible.
R2—Audible, but unintelligible.
R3—Audible, partly intelligible.
R4—Just intelligible.
R5—Quiet, but intelligible.
R6—Moderately loud.
R7—Normal, good clear reception.
R8—Strong reception.
R9—Wipe-out signals.

Fading and Atmospherics

F=slight fading ; FF=fairly deep fading, but no programme lost ; FFF=complete fade-out, and programme lost. (N=no fading.)
SS=very slow fading (minutes) ; S=slow (one minute or so) ; R=fairly rapid (several seconds) ; RR=very rapid (one second or less).
X=slight static ; XX=rather bad ; XXX=very strong atmospherics. (N=no atmospherics.)

Type of Receiver.

One-valve Receiver	0-v-0
Det. and one L.F.	0-v-1
H.F.—Det.—2 L.F.	1-v-2
Screened Grid—Det.—Pentode	SG-v-pen.
Plug-in Adaptor and 2 L.F.	Av-2
Converter and 6-valve superhet	C+SH6
Commercial All-Wave Set, 5 valves	AW5

Specimen Report

Oct. 2
19.40—JVM (27.93 m.) R8/N/X Music and announcement.
19.41—W2XAD (19.57 m.) R5/F/X Baseball commentary.

Oct. 6
19.35—W8XK (19.72 m.) R5/FF/N Play and station ann'ct.
22.10—W2XAF (31.48 m.) R8/FF/XX Talk.

Receiver 0-v-pen., with 30 ft. outdoor aerial. All reception on 'phones.

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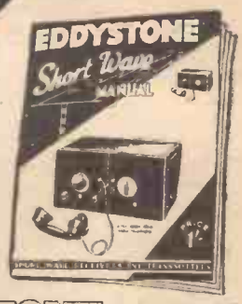

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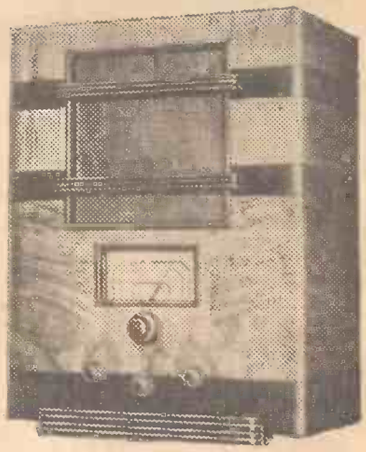
Invicta
MODEL AW 57



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- 25 - 75
- 75 - 200
- 200 - 550
- 800 - 2000

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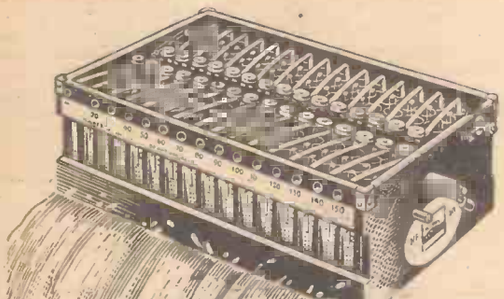

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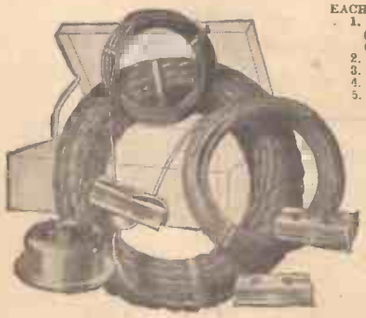

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m.	Mc/s	kW	Station	Dial Reading
75	4.00	0.05	Ponta Delgada (Azores) CT2AJ.	.....
70.2	4.27	20	Kharbarovsk RV15. 06.00—14.00.	.....
51.72	5.80	1	Caracas (Venez.) YV2RC. SUN., 13.00—02.20; W'KD'YS, 15.15-18.00; 21.00-02.00.	.....
51.52	5.82	..	San Jose (Costa Rica) TIX. 00.00—04.00.	.....
51.28	5.85	..	Maracaibo (Venez.) YV5RMO. 22.00-02.00.	.....
50.26	5.97	10	Vatican City (Italy) HVJ. Daily, 19.00—19.15; SUN., 10.00.	.....
50.16	5.98	0.2	Trujillo City (D.R.) HIX.	.....
50	6.00	20	Moscow (U.S.S.R.) RW59.	.....
		1	Mexico City XEBT. 00.00—09.00.	.....
49.96	6.00	6	Montreal VE9DN. 23.00—05.00.	.....
49.92	6.01	0.5	Havana (Cuba) COCO. 21.00—00.00; 01.00—03.00; SUN., 04.30—06.30 also.	.....
49.85	6.01	0.09	Singapore (S.S.) ZHI. MON., WED., THURS., 23.00—01.30; SUN., 03.40—05.10.	.....
		1.6	Bogotá (Colombia) HJ3ABH.	.....
49.83	6.02	5-50	Zeesen DJC. 17.00—21.30; 22.05—03.30.	.....
49.75	6.03	0.1	Panama City HP5B. 17.00—18.00; 01.00—03.30.	.....
		0.1	Calgary (Alberta) VE9CA.	.....
49.67	6.04	10	Boston (Mass.) W1XAL. SUN., 22.00-00.00. MON., TUES., & THURS., 00.00—02.00.	.....
		2.5	Miami W4XB. 18.00—20.30; 23.30—06.00.	.....
		3	Pernambuco PRA8. Daily, 20.00—00.30.	.....
49.65	6.04	0.15	Barranquilla HJ1ABG. 23.00—03.00.	.....
49.6	6.05	0.5	Colombo (Ceylon). Daily, 13.30—16.30.	.....
49.59	6.05	15	*Daventry GSA.	.....
49.5	6.06	10	Cincinnati W8XAL. Daily, 12.30—02.00; 05.00—08.00.	.....
		10	Philadelphia (U.S.A.) W3XAU. 01.00-04.00.	.....
		0.5	Skamlebaek (Denmark) OXY.	.....
49.45	6.07	0.15	Manizales (Colombia)HJ4ABL. 22.30-00.30.	.....
49.41	6.07	1.5	Vienna Experimental OER2. MON. to FRI., 14.00—22.00; SAT., to 23.00.	.....
49.33	6.08	0.05	Penang (S.S.) ZHJ. WEEKDAYS, 12.40-14.40.	.....
		0.5	Chicago (Ill.) W9XAA. D'ly, 15.00—01.00.	.....
49.31	6.08	0.5	Nairobi (Kenya) VQ7LO. SUN., 16.00-19.00. MON.toFRI., 10.45-11.15; 16.30-19.30. TUES. & THURS., 13.30-14.30. SAT., 16.00-20.00.	.....
49.3	6.08	0.1	Cali (Colombia) HJ5ABD. 00.00—03.00.	.....
49.26	6.09	0.5	Bowmanville (Canada) CRCX. Daily, 22.30—04.30. SUN., 20.00—04.30.	.....
49.2	6.10	5	Johannesburg (S.A.) ZTJ. Experimental.	.....
49.18	6.10	35	Bound Brook (N.J.) W3XAL. MON., WED., SAT., 22.00—06.00.	.....
		10	Chicago (Ill.) W9XF. 01.00—06.00.	.....
		1	Belgrade (Yugoslavia).	.....
49.15	6.10	0.3	Manizales (Colombia) HJ4ABB. 01.00-04.00	.....
49.1	6.11	15	*Daventry GSL.	.....
		0.5	Calcutta (India) VUC. D'ly, 07.06—08.06; Irreg., 13.06—16.36: SUN., 04.36—07.36.	.....
49.05	6.11	..	Poděbrady (Prague) (Czechoslovakia) OLR.	.....
49.02	6.12	1	Wayne (N.J.) W2XE. 03.00—04.00.	.....
48.92	6.13	0.25	Havana (Cuba) COCD. 23.00—05.00.	.....
		0.2	Halifax (Nova Scotia) VE9HX. Daily, 14.00—18.00; 22.00—04.00. FRI., 18.00—20.00. SAT. and SUN., 19.00—04.00.	.....
48.86	6.14	40	Pittsburgh W8XK. 03.00—06.00.	.....
48.78	6.15	2	Winnipeg CJRO. Daily, 00.00—05.00; SAT., 21.00—06.00; SUN., 22.00—03.30.	.....
		0.5	Lisbon (Por.) CSL. 12.00-14.00; 17.00-00.00.	.....
		..	Caracas (Venez.). YV3RC. 20.30—01.30.	.....
48.4	6.20	5	Parede (Portugal) CT1GO. SUN., 16.30—18.00. Daily (ex. TUES.), 00.20—01.30.	.....
47.5	6.32	..	Trujillo City HIZ. Daily, 21.40—22.40.	.....
47.05	6.37	..	Caracas (Venez.) YV4RC. 21.30—03.30.	.....
46.86	6.41	0.5	San Jose (Costa Rica) TIPG. 22.00—04.00.	.....
46.52	6.45	1	Barranquilla HJ1ABB. D'ly, 21.30—03.00.	.....
46	6.52	0.5	Valencia YV6RV. 17.00-18.00; 23.00-03.00.	.....
45.31	6.62	..	Riobamba PRADO. FRI., 02.00—04.30.	.....
45	6.67	0.2	Guayaquil (Ecuador) HC2RL.	.....
42.36	7.08	0.15	Georgetown (British Guiana) VP3MR. SUN., 12.45—15.15. W'KD'YS, 21.45—01.45.	.....
38.48	7.78	20	Radio-Nations HBP. SAT., 22.30—23.15.	.....
36.5	8.21	0.25	Quito (Ecuador) HCJB. Daily (ex. MON.), 17.15—19.00; 00.00—04.00.	.....
34.29	8.75	0.5	Hong Kong ZCK3. Daily 04.30—06.15.	.....
32.88	9.12	5	Budapest (Hun'y) HAT4. SUN., 00.00-01.00.	.....
31.8	9.43	..	Havana (Cuba) COCH. 16.00-17.00; 22.00—23.00; 01.00—02.00.	.....
31.58	9.50	5	Rio de Janeiro PRF5. 21.15—23.00.	.....
31.55	9.51	15	*Daventry GSB.	.....
		1.5	Melbourne VK3ME. 09.00-12.00 (ex. SUN.).	.....
31.51	9.52	20	Moscow (U.S.S.R.) RAN.	.....
31.48	9.53	1	Jelöy LKJ1. 10.00—13.00; 16.00—23.00.	.....
		30	Schenectady (N.Y.) W2XAF. 22.00—06.00.	.....
		20	Tokio JZI. D'ly, 05.00—06.00; MON. and THURS., 21.00—22.00; TUES. and FRI., 19.00—20.00.	.....
31.45	9.54	5-50	Zeesen DJN. 08.45—12.15; 22.05—03.30.	.....
31.45	9.54	..	Suva VPD2. D'ly (ex. SUN.), 05.30-06.30.	.....
31.38	9.56	5-50	Zeesen (Germany) DJA. 05.30—07.15; 13.00—16.30; 22.05—02.15.	.....
31.36	9.56	4.5	Bombay VUB. SUN., 06.00—07.00; TUES., 16.30—17.30; SAT., 16.30—17.30.	.....
31.35	9.57	10	Millis (Mass.) W1XK. D'ly, 11.00—05.00.	.....
31.32	9.58	15	*Daventry GSC.	.....
		1	Lyndhurst (Australia) VK3LR. MON. to FRI., 08.15—12.30; SAT., 03.00—12.30.	.....
		5	Buenos Aires (Argentine)LRX. 22.00-02.00.	.....
		10	Philadelphia (Pa.) W3XAU. 17.00—01.00.	.....
		20	Sydney (Australia) VK2ME. SUN., 06.00—08.00; 09.30—13.30; 14.00—16.00.	.....
		20	Eindhoven PCJ. SUN., 19.00—20.00; MON., 00.00—01:00; TUES. 18.30—20.00; THURS., 00.00—03.00.	.....
31.27	9.59	20	Radio-Nations HBL. SAT., 10.30-11.15.	.....
31.13	9.63	25	Rome (Italy) 2RO.	.....
31.09	9.65	1	Sourabaya (Java) YDB. 09.30-14.30.	.....
31.07	9.65	2.5	Lisbon CT1AA. TUES., THURS., 22.00-00.00.	.....
31	9.68	0.5	Lisbon (Portugal) CT1CT. THURS., 21.00—23.00.; SUN., 12.00—14.00.	.....
30.43	9.86	20	Madrid (Spain) EAQ. 22.15—00.30; SAT., 18.00—20.00 also.	.....
29.24	10.26	3	Bandoeng (Java) PMN. D'ly, 13.00—16.30.	.....
29.04	10.33	9	Ruysselede (Belgium) ORK. 18.30—20.00.	.....
28.01	10.71	20	Tokio (Japan) JVN.	.....
27.25	11.01	3	Bandoeng (Java) PLP.	.....
25.62	11.71	..	Medellin (Colombia)HJ4ABA. 23.30-03.30.	.....
25.6	11.72	2	Winnipeg CJRX. D'ly, 00.00-05.00; SAT., 21.00—06.00; SUN., 22.00—03.30.	.....
		12	Radio-Colonial (Paris) TPA4. 23.25-05.00.	.....
25.53	11.75	15	*Daventry GSD.	.....
25.51	11.76	..	Poděbrady (Prague) (Czechoslovakia) OLR.	.....
25.49	11.77	5-50	Zeesen (Germany) DJD. 17.00—21.30.	.....
25.45	11.79	10	Boston (Mass.) W1XAL. Daily (ex. SAT. & SUN.), 22.30—23.30.	.....
25.4	11.81	25	Rome (Italy) 2RO. Daily, 13.15—14.00; 14.15-16.00; 17.00-18.00; 18.45-22.15.	.....
25.38	11.82	15	*Daventry GSN.	.....
25.36	11.83	1	Wayne (N.J.) W2XE. 23.00-03.00.	.....
		2	Lisbon (Portugal) CT1AA. TUES., THURS., SAT., 21.30—00.00.	.....
25.29	11.86	15	*Daventry GSE.	.....
25.27	11.87	40	Pittsburgh W8XK. 22.00—03.00.	.....
25.23	11.88	12	Radio-Colonial (Paris) TPA3. 06.00—09.00; 22.30—23.00.	.....
25	12.00	20	Moscow RNE. D'ly (ex. SUN. & WED.), 17.30—22.00; SUN. & WED., 11.00—22.00.	.....
24.83	12.08	0.5	Lisbon (Portugal) CT1CT. SUN., 14.00—16.00; THURS., 20.00—21.00.	.....
24.52	12.23	7.5	Reykjavik (Iceland) TFJ. SUN., 18.40-19.30.	.....
24.2	12.40	0.35	Parede (Portugal) CT1GO. SUN., 15.00—16.30; TUES., THURS., FRI., 18.00-19.15.	.....
22	13.63	10	Warsaw (Poland) SPW. MON., WED., FRI., 16.30—17.30.	.....
20.04	14.97	7	Sofia (Bulgaria) LZA. 05.00—21.30.	.....
19.85	15.11	5-50	Zeesen DJL. 14.00—15.00; 21.50—03.45.	.....
19.84	15.12	10	Vatican City HVJ. Daily, 15.30—15.45.	.....
19.82	15.14	10	*Daventry GSF.	.....
19.8	15.16	20	Tokio (Japan) JZK. D'ly 05.00—06.00; MON. & THURS., 21.00—22.00; TUES. & FRI., 19.00—20.00.	.....
19.76	15.18	10	*Daventry GSO.	.....
19.74	15.20	5-50	Zeesen DJB. 13.00—16.30; 17.30—07.00.	.....
19.72	15.21	40	Pittsburgh W8XK. 15.00—01.00.	.....
19.71	15.22	20	Eindhoven PCJ. Exp. SUN., 12.00—16.00; TUES., 09.30—11.00; WED., 13.00—16.00.	.....
19.69	15.23	..	Poděbrady (Prague) (Czechoslovakia) OLR.	.....
19.68	15.24	12	Radio-Colonial (Paris) TPA2. 11.00—16.00.	.....
19.66	15.26	10	*Daventry GSI.	.....
19.65	15.27	1	Wayne (N.J.) W2XE. 18.00—23.00.	.....
19.63	15.28	5-50	Zeesen (Germany) DJQ. 04.30—06.00.	.....
19.62	15.29	5	Buenos Aires LRU. 12.00—22.00.	.....
19.60	15.31	10	*Daventry GSP.	.....
19.57	15.33	18	Schenectady W2XAD. Daily, 16.00—21.45.	.....
19.56	15.34	5-50	Zeesen (Germany) DJR.	.....
19.52	15.37	20	Budapest (Szekesfehervar)(Hungary)HAS3. SUN., 14.00—15.00.	.....
16.89	17.76	5-50	Zeesen (Germany) DJE. 13.00—16.30.	.....
16.88	17.77	23	Huizen (Holland) PHI. SUN., 13.00—16.00; MON., THURS., FRI., SAT., 12.30—14.30.	.....
16.87	17.78	35	Bound Brook W3XAL. 14.00—22.00.	.....
16.86	17.79	10	*Daventry GSG.	.....
15.93	18.83	60	Bandoeng (Java) PLE.	.....
15.50	19.35	..	Bandoeng (Java) PMA.	.....
13.97	21.47	10	*Daventry GSH.	.....
13.94	21.52	1	Wayne (N.J.) W2XE. 12.30—18.00.	.....
13.93	21.53	10	*Daventry GSJ.	.....
13.93	21.54	40	Pittsburgh W8XK. 13.00—15.00.	.....

* For transmission times see Short-Wave Programmes.

Short-Wave Programmes

All times are given in G.M.T.

	Call		mc/s	m.
Daventry	GSB		9.51	31.55
Daventry	GSC		9.58	31.32
Daventry	GSD		11.75	25.53
Daventry	GSF		15.14	19.82
Daventry	GSH		21.47	13.97
Daventry	GSI		15.26	19.66
Daventry	GSO		15.18	19.76
Daventry	GSP		15.31	19.60
Boston (Mass.)	W1XAL	(a)	11.79	25.45
		(b)	6.04	49.67
Budapest (Hungary)	HAS3	(a)	15.37	19.52
Budapest (Hungary)	HAT4	(b)	9.12	32.88
Eindhoven (Holland)	PCJ	(a)	15.20	19.71
		(b)	9.59	31.28
Huizen (Holland) (*Holland India Broadcasting Station PHOHI*)	PHI		17.77	16.88
Paris (France) (Radio-Colonial)	TPA2	(a)	15.24	19.68
	TPA3	(b)	11.88	25.23
	TPA4	(c)	11.72	25.6
Pittsburgh (Pa., U.S.A.)	W8XK	(a)	15.21	19.72
		(b)	11.87	25.27
		(c)	6.14	48.86
Radio-Nations (Prangins) (Switzerland)	HBP		7.78	38.48
	HBL		9.59	31.27
Reykjavik (Iceland)	TFJ		12.23	24.52
Rio de Janeiro (Brazil)	PRF5		9.50	31.58
Rome (Italy)	2RO	(a)	11.81	25.4
		(b)	9.63	31.13
Ruysselede (Belgium)	ORK		10.33	29.04
Schenectady (New York, U.S.A.)	W2XAD	(a)	15.33	19.57
Schenectady (New York, U.S.A.)	W2XAF	(b)	9.53	31.48
Skamlebaek (Denmark)	OXY		6.06	49.5
Sofia (Bulgaria)	LZA		14.97	20.04
Suva (Fiji)	VPD2		9.54	31.45
Vatican City (Italy)	HVJ	(a)	15.12	19.84
		(b)	5.97	50.26
Warsaw (Poland)	SPW		13.63	22
Zeesen (Germany)	DJA		9.56	31.38
Zeesen (Germany)	DJB		15.20	19.74
Zeesen (Germany)	DJD		11.77	25.49
Zeesen (Germany)	DJE		17.76	16.89
Zeesen (Germany)	DJL		15.11	19.85
Zeesen (Germany)	DJN		9.54	31.45
Zeesen (Germany)	DJQ		15.28	19.63

*Electrical Recordings.
†Gramophone Records.

SUNDAY, November 1

EMPIRE

The Empire programmes are printed in outline for the convenience of overseas readers.

The Tokio programmes did not arrive in time for inclusion in this number.

Transmission 1 (GSO, GSB), 07.15—Big Ben. Service.* 08.06—Orchestra. 08.55-09.20—Newsletter, Sports Summary.

Transmission 2 (GSH, GSF), 11.00—Big Ben. Military Band, Norman Allin (Bass). 12.00—Talk on Shipping.* 12.20—Alfred Cortot (Pfte.).† 12.30—Orchestra. 12.55—Newsletter, Sports Summary. 13.20—Music.† 13.25—Service.* 13.40-13.45—Envoi.†

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. Rispah Goodacre (Contralto). 14.20—Military Band. 15.00—Talk on Shipping.* 15.20—Pau Casals ('Cello).† 15.30—Service.* 16.20—Cecil Dixon (Pfte.). 16.30—Newsletter, Sports Summary. 16.55-17.00—Envoi.†

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. Musical Comedy.† 17.40—Talk. 18.00—Newsletter, Sports Summary. 18.20—Band, Harold Bradbury (Tenor). 19.00—Coronel and Falkland Islands. 19.50—Music.† 19.55—Service. 20.45—Ruth Pearl (Violin). 21.00—Newsletter, Sports Summary. 21.20 — Orchestra. 22.10—Short Story. 22.30-22.45—Epilogue.

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. String Quartet. 23.25—Pfte. Recital† 23.30—Service.* 00.20—Helen Alston (Pfte.). 00.40-01.00—Newsletter, Sports Summary.

Transmission 6 (GSD, GSC), 02.00—Big Ben. Service.* 02.16—Silver Band. 03.05—Talk on Shipping.* 03.25—Records.† 03.40-04.00—Newsletter, Sports Summary.

BOSTON, (*b*) 22.00-00.00—Talks on Football, Books, Science; Events; Reviews; Music.

BUDAPEST, (*a*) 14.00—Choir; News; Anthem. (*b*) See 14.00.

EINDHOVEN, (*a*) 12.00-13.00—For Asia: Music; Political Review by Paul de Waart; Mission News; Music; Talk; News. 13.00—Call; Talk. 13.25—Music. 13.55—Report by Han Hollander from the Amsterdam Stadium: The International Football Match, Holland *v.* Norway; Music. 15.55-16.00—Music. (*b*) 19.00-20.00—For Africa: See 12.00.

HUIZEN, 13.00—Anthem; Call; Talk. 13.25—Music. 13.55—Report by Han Hollander from the Amsterdam Stadium: The International Football Match, Holland *v.* Norway Music. 15.55-16.00—Music

MOSCOW, (*a, c*) 11.00 — Talks (Eng.). 12.00—French Programme. 13.00—Talk (Dutch). 15.00—Talks (Eng.). 17.30—Concert. 20.00—German Programme. 21.05—Talks (Eng.). 22.00 — Talks (Ger.). (*b*) 23.00—Talk (Sp.). 00.00—News for the Americas (Eng., Ger.).

PARIS (Radio-Colonial), (*a, b.*) 07.00—News; Records; Topical. (*b*) 07.55—Records. 08.30—Topical; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Notes. 11.00—Concert; at 12.00—News (Eng.). 12.30—Records. 12.45—News. 13.15—Concert. 14.00—Reviews. 14.20—Markets. 14.30-16.00—To be announced. (*b*) 17.15—News; Talk. 18.00—News (Arabic); Records. 18.30—Topical; Records. 19.30—News (Eng., It., Fr.). 20.30—To be announced. 22.40—News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Play on Records. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—For Children. 15.00—Southernaires. 15.30—Strings. 15.52—Presbyterian Church. 17.00—American Youth. 17.30—Music Hall. 18.30—Christian Endeavour. 18.45—Concert Echoes. 18.55 — Programmes. 19.00 — R.C.A. Magic Key. 20.00—Our Neighbours. 20.30—Orchestra. 21.00—Shadyside Church. 22.00—We, The People. 22.30—Stoopnagle. 23.00—Bulletin. 23.15—Thank you, Stusia. 23.30—Politics; Music. 23.45—Quartet. (*b*) 00.00—Variety. 02.15—Paul Whiteman. (*c*) 03.00—Edwin C. Hill. 03.30—Y.M.C.A. 04.00—Organ; Sports. 04.15—Missionary Broadcast. 05.00-06.00—Orchestras.

REYKJAVIK, 18.40—Call (Eng.); Music; Address and Talk (Eng.); News (Eng., Ice.). 19.05-19.30—Call and Address (Ger.); Music; Talk and News (Ger.).

ROME, (*a*) 13.15-13.55—Songs and Music. 16.30-17.30—News; Band; Poems. 19.05-22.15—From Rome (420.8 m.).

RUYSSELEDE, 18.30—Records. 19.00—From Brussels 2. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 15.00—Reveries. 15.30—South Sea Islanders. 16.00—News; Two Pftes. 16.15—Trio. 16.30—Musical Comedy Revue. 17.00—International Salute to NBC. 17.30—Chicago University Discussion. 18.00—Soprano. 18.45—Serenade. 19.00—Beneath the Surface. 19.30—Mysteries. 20.00—Metropolitan Opera Auditions. 20.30—Grand Hotel. (*b*) 21.00—Variety. 22.00—Soprano. 22.30—Ed. McConnell. 23.00—Roman Catholic Hour. 23.30—A Tale. 00.00—Jack Benny. 00.30—Sports. 00.45—Variety. 02.30—Familiar Music. 03.00—Concert. 04.00-05.00—Orchestras; at 04.30—News.

SKAMLEBAEK, 16.00-17.20 and 18.00-23.30—From Kalundborg.

SOFIA, 05.00-21.30 — From Sofia (352.9 m.).

VATICAN CITY, (*b*) 10.00—For Invalids (Latin, Fr.).

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News; Music. 07.00—News (Eng.). 07.15—Opera Arias. 08.45—Talk: The German Sugar Industry. 09.00—Folk Music. 09.15—Songs (Neumeyer). 09.30—News. 09.45—Violin Sonata in G (Beethoven).

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.). 11.00—Light Music; at 12.00—News (Eng.). 13.00—News and Call (DJQ). 13.15—Meditation. 13.30—For Hitler Youth. 13.45—Pfte. Variations (Brahms). 14.00—News (Eng., Dutch). 14.15—Wagner. 15.30-16.00—For Women.

ZEESEN (DJD, DJL, DJC), 11.00-13.00—Orchestra. 16.35—Call (Ger., Eng.); Band. 17.15—News. 17.30—"Sunday." 17.45—For Children. 18.00—Concert. 19.00—News (Eng.). 19.15—Variety. 20.00—Newcomers. 20.45—Sports. 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN), 16.10-17.25—Symphony Concert. 21.50—Call (Ger., Sp., Port.). 22.00—For Children. 22.30—Folk Music. 22.45—News. 23.00—"Sunday." 23.15—Concert. 00.15—News (Sp., Port.). 01.15—Sports. 01.30—Band; at 02.00—News. 03.30—News (Sp., Ger., Port.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.). 22.00—For Children. 22.30—Folk Music. 22.45—News. 23.00—"Sunday." 23.15—Concert. 00.15—Sports. 00.30—Variety. 01.15—News (Eng.). 01.30—Band; at 02.00—News. 03.30—News (Sp.).

MONDAY, November 2

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. Novelty Quintet.* 07.46—Banjo Recital. 07.55—Science Talk.* 08.15—Talk.* 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. "D'ye Ken John Peel?"* 11.32—"Empire Exchange." 11.47—Band. 12.15—Murray Ashford and Edgar Sawyer (Entertainers). 12.25—Orchestra. 13.00—News. 13.20-13.45—Dance Music.*

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. Orchestra. 14.30—Reading. 14.45—Coon Songs.† 14.55—Talk.* 15.35—Janet Howe (Contralto), Frederick Yeo (Tenor). 16.00—Frederick Grinke (Violin). Dorothy Manley (Pfte.). 16.30—News. 16.50-17.00—Dance Music.†

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. "Empire Exchange."* 17.32—Octet, Percy Manchester (Tenor). 18.00 — News. 18.40 — Orchestra, Oda Slobodskaya (Sop.). 19.20—"Entertainment Parade." 20.00—Quintet.* 20.30 — Recital. 21.00—News. 21.20 — Glyn Townley-Williams (Pfte.). Joseph Pessac (Violin). 21.53-22.45—Coronel and Falkland Islands.*

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. "Empire Exchange."* 23.17—Virginia McLean (Pfte.). 23.30—Musical Play.* 00.30—Edward Walker (Flute). 00.40-01.00—News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. "D'ye Ken John Peel?"* 02.31—Organ. 03.05—"Empire Exchange."* 03.20—Violin Recital. 03.40-04.00—News.

BOSTON (*a*) 23.00—News. (*b*) 00.00-01.15—Course in Modern Radio.

EINDHOVEN, (*b*), 00.00-01.00—For the Americas: Music; Political Review by Paul de Waart; Mission News; Music; Talk; Notes.

HUIZEN, 12.30—Anthem; Call. 12.35—Music. 12.40—News; Music. 13.15—Mail. 13.40—French Music. 14.00—Sports. 14.20-14.30—Dance Music.

MOSCOW, (*a, c*) 17.30—Concert. 20.00—Talk (Ger.). 21.05—U.S.S.R. Review (Eng.). 22.00—Talk (Hung.). (*b*) 23.00—Talk (Sp.). 00.00—News for the Americas (Eng.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Review. (*b*) 07.55—Records. 08.30—Talk; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Notes. 11.00—Concert; at 12.00: News (Eng.); and at 12.45: News. 14.00—Talks. 14.20—Markets. 14.30—Concert. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert; at 18.30: News; Review. 19.30—News (Eng., It., Fr.). 20.30—To be announced. 22.40—News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.)

PITTSBURGH, (*a*) 14.00—Breakfast Club. 14.30—Musical Clock. 14.45—Style and Shopping. 15.00—News; Music. 15.15—Jones. 15.30—Pepper Young. 15.45—Rhythm. 16.00—Herman and Banta. 16.15—Home. 16.30—Vic and Sade. 16.45—Edward MacHugh. 17.00—News. 17.15—Slim and Jack Gang. 17.30—Farm and Home. 18.30—Matinée. 19.30—Home Forum. 20.00—Manhatters. 20.30—Human Values. 20.45—Originalities. 21.00—Marguerite Padula. 21.15—P.T.A. 21.30—Trio. 21.45—Young Hickory. 22.00—For Children; at 22.15: Dr. Clausen. 23.00—News. 23.30—Sports. 23.45—Lowell Thomas. (*b*) 00.00—Democratic Committee. 00.15—John B. Kennedy. 00.30—Variety. 02.00—Democratic Committees. (*c*) 03.00—Singing Sam. 03.15 — Republican Committee. 03.45 — Communist Committee. 04.00—News; Bulletin. 04.15—Minstrels. 04.30-06.00—Orchestras; at 05.00: Shandor (Violin).

RADIO-NATIONS (Prangins), (*a, b*) 00.00-01.05—For Swiss Nationals Abroad. Hans Huber Memorial Programme. Italian-Swiss Folk Songs. Jaques-Dalcroze.

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News; Talks; Organ. 14.00-15.30—News (Eng.); Excerpts, Requiem Mass (Verdi); News. 16.30-17.30—News; Sacred Music. 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 22.59—American Hour from Rome. News (Eng., It.); Excerpt, Requiem Mass (Verdi); Talk; Organ; Mail.

RUYSSELEDE, 18.30 — Records. 18.45—From Brussels 1. 19.15—Record. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Mrs. Wiggs of the Cabbage Patch. 15.15—John's other Wife. 15.30—Plain Bill. 15.45—To-day's Children. 16.00—David Harum. 16.15—Backstage Wife. 16.30—Charm. 16.45—Experience. 17.00—Girl Alone. 17.15—Mary Marlin. 17.30—Farm Programme. 18.00—White (Tenor). 18.15—High Hatters. 18.30—Harding's Wife. 18.45—Happy Jack. 19.00—Education Forum. 19.30—Waltzes. 20.00—Pepper Young. 20.15—Ma Perkins. 20.30—Vic and Sade. (*b*) 21.00—For Women. 21.30—Republican Committee. 21.45—Stocks. 22.00—Nash (Tenor). 22.15—Tom Mix. 22.30—Jack Armstrong. 22.45—Collegians. 23.00—Education. 23.15—Gurney (Bass). 23.30—News; Songs. 23.45—Three Scamps. 00.00—Amos 'n' Andy. 00.15—Bridge. 00.30—Stocks. 00.50—News (Sp.). 01.00—Spanish Programme. 01.30—Variety. 02.00—Warden E. Lawes. 02.30-05.00—Variety.

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45 — From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (It.). (*b*) 19.00—See 15.30.

WARSAW, 17.30-18.30—Music and News; Talk; Polish Music.

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News (Ger.); Music. 06.55—Greetings to Australia. 07.00—News (Eng.). 07.15—Topical. 07.30—Orchestra. 08.30—Variety. 09.15—Sports. 09.30—News. 09.45—For Children.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); Music; at 12.00: News (Eng.). 12.55—Greetings to the Far East. 13.00—News and Call (DJQ). 13.15—New Voices. 14.00—News (Eng., Dutch). 14.15—Topical. 14.30—"Fairy Tales"—with Music. 15.15—Concert. 15.45—Sports.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.); For Hitler Youth. 17.00—Pfte. 17.15—News; Reading. 17.45—Musical Grand Tour. 19.00—News (Eng.). 19.15—Topical. 19.30—Violin. 20.00—Music and Poetry. 20.45—Songs. 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN), 21.50—Call (Ger., Sp.). 22.00—Topical. 22.15—Violin Sonata (Brahms). 22.45—News; Music. 00.15—News (Sp.). 00.30—Newcomers. 01.15—Topical. 01.30—Soprano. 01.45—For Girls. 02.00—News; Concert. 03.30—News (Sp., Ger.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.). 22.00—Maria Scarbath (Coloratura-Soprano). 22.15—Sonata in A (Brahms) by Christa Richter (Violin). 22.45—News. 23.00—Musical Grand Tour. 00.15—Topical. 00.30 — Newcomers. 01.15—News (Eng.). 01.30—Reading. 01.45—For Girls. 02.00—News; Music. 03.30—News (Sp.).

TUESDAY, November 3

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. Frank Merrick (Pfte.). 07.41—"Empire Exchange."* 07.56—Musical Play.* 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. "Empire Magazine." 11.32—Szigeti (Violin).† 11.40—Coronel and Falkland Islands.* 12.30—Brass Band, James Breakey (Baritone). 13.00—News. 13.20-13.45—Theatre Orchestra.

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. Talk: "Foreign Affairs." 14.16—Adelaide Newman (Pfte.). 14.30—Orchestra. 14.50—Musical Play.* 15.50—Orchestra. 16.30—News. 16.50-17.00—Music.

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. "Empire Magazine."* 17.47—Orchestra. 18.00—News. 18.20—Talk: "Foreign Affairs."* 18.35—May Blyth (Soprano). 19.00—Music.* 19.25—New Records. 20.00—Dance Band. 20.30—Peter Dawson (Bass-baritone). 21.00—News. 21.20—Science Talk. 21.40—Music.† 22.15—Bertha Hagart (Pfte.). 22.27-22.45—Talk: "Foreign Affairs."*

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. Dance Music. 23.30—Talk: "Foreign Affairs."* 23.45—Glyn Eastman (Baritone). 00.00—C. H. Trevor (Organ), Eileen Andjelkovitch (Violin). 00.40-01.00—News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. Orchestra, Margaret Eaves (Soprano). 03.00—Talk: "Foreign Affairs."* 03.15—Dance Music.† 03.30—Murray Ashford and Edgar Sawyer (Entertainers).* 03.40-04.00—News.

BOSTON, (*a*) 23.00—News.

EINDHOVEN, (*a*) 09.30-11.00—Variety. (*b*) 18.30-20.00—Variety.

MOSCOW, (*a, c*) 17.30—Concert. 20.00—Talk (Ger.). 21.05—Talk (Dutch). 22.00—Talk (Swed.). (*b*) 23.00—Talk (Sp.). 00.00—News for the Americas (Eng.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Review. (*b*) 07.35—Records. 08.30—Topical; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Notes. 11.00—Concert; at 12.00: News (Eng.), and at 12.45: News. 14.00—Shipping; Social Notes. 14.20—Markets. 14.30—"Le poignard malais" — Play after Bernard (d'Aragny); "Poète, prends ton luth" (Deval); Poems (Pohchon). 15.55—Exchange. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert; at 18.30: News; Talk. 19.45—News (It., Fr.). 20.30—"Boris Godunov" (Mussorgsky). 22.40—News (Port.). (*c*) 23.15—Music. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—Breakfast Club. 14.45—Style and Shopping. 15.00—News; Music. 15.15—Jones. 15.30—Pepper Young. 15.45—Rhythm. 16.00—Neighbour Nell. 16.15—Home. 16.30—Vic and Sade. 16.45—Edward MacHugh. 17.00—News. 17.15—Farm and Home. 18.30—Vaughn de Leath. 18.45—Slim and Jack Gang. 19.00

—Words and Music. 19.30—Home Forum. 20.00—Clubs. 20.15—Variety. 20.45—Have you heard? 21.00—Landt (Tenor). 21.15—Joan's Escorts. 21.30—Anne Muenchen. 21.45—Young Hickory. 22.00—For Children; at 22.15: Orchestra. 23.00—News. 23.15—Thank You, Stusia. 23.30—Baseball. 23.45—Lowell Thomas. (*b*) 00.00—Variety. (*c*) 03.00—Hildegard. 03.30—Harmony Portraits. 04.00—News; Bulletin. 04.15-06.00—Orchestras; at 05.00: Shandor (Violin).

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News; Talks; 'Cello. 14.00-15.30—News (Eng., Chin.); Trio; Pfte.; Duets; News. 16.30-17.30—News; Operetta Music. 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 23.20—Call (It., Sp., Port.); News; "Dafni"—Opera (Mulè); Talk; News (Sp., Port.).

RUYSSELEDE, 18.30—From Brussels 1. 19.00—Records. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Mrs. Wiggs of the Cabbage Patch. 15.15—John's other Wife. 15.30—Plain Bill. 15.45—To-day's Children. 16.00—David Harum. 16.15—Backstage Wife. 16.30—Mystery Chef. 16.45—Wife Saver. 17.00—Girl Alone. 17.15—Mary Marlin. 17.30—Arnold's Cadets. 17.45—Farm Programme. 18.15—High Hatters. 18.30—Harding's Wife. 18.45—Happy Jack. 19.00—NBC Music Guild. 19.30—Rhythm. 20.00—Pepper Young. 20.15—Ma Perkins. 20.30—Vic and Sade. (*b*) 21.00—Cheerio. 21.15—For Women. 21.30—Republican Committee. 21.45—Stocks. 22.00—While the City sleeps. 22.15—Tom Mix. 22.30—Jack Armstrong. 22.45—Orchestra. 23.00—Flying Time. 23.15—Hymns. 23.30—News; Mail. 00.00—Amos 'n' Andy. 00.15—Experience. 00.30—Sports. 00.50—News (Sp.). 01.00—Orchestra. 01.30—Spanish Programme. 02.00—Vox Pop. 02.30—Fred Astaire; Variety. 04.00—Sport Shots. 04.15-05.00—Orchestras.

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45 — From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (Eng.). (*b*) 19.00—See 15.30.

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News; Music. 06.55—Greetings to New Zealand. 07.00—News (Eng.). 07.15—Topical. 07.30—Musical Grand Tour. 08.45—For Girls. 09.00—Sonata in A (Brahms) by Christa Richter (Violin). 09.30—News; Reading. 10.00—Songs.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); Music; at 12.00: News: (Eng.). 13.00—News and Call (DJQ). 13.15—Announcements. 14.00—News (Eng., Dutch). 14.15—Topical. 14.30—German Lesson. 14.45—"Hunting"—Music and Poetry. 15.30—Pfte. 15.45-16.00—Chinese Songs.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.); For Women. 17.00—Soprano. 17.15—News; Talk. 17.45—Opera Music. 19.00—News (Eng.); Topical. 19.30—Music. 20.30—Band. 21.00-21.20—News (Ger., Eng.).

ZEESEN (DJA, DJN), 21.50—Call (Ger., Sp., Port.). 22.00—Music and Poems. 22.45—News; Opera Music. 00.15—News (Sp., Port.). 00.30—Pfte. 00.45—For Women. 01.00—Songs (Schubert). 01.15—Topical. 01.30—Band. 02.00—News; Music. 03.30—News (Sp., Ger., Port.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.). 22.00—Music and Poetry. 22.45—News. 23.00—Opera Music. 00.15—Topical. 00.30—Prelude and Fugue for the Left Hand (Weweler). 00.45—For Women. 01.00—Songs (Schubert). 01.15—News (Eng.); Band. 02.00—News; Music. 03.30—News (Sp.).

WEDNESDAY, Nov. 4

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. Chamber Music: Jean Pougnet (Violin), Anthony Pini ('Cello), Angus Morrison (Pfte.). Winifred Radford (Soprano). 08.00—Talk: "Foreign Affairs."* 08.15—"Empire Magazine."* 08.45—Dance Music.† 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. Cinema Organ. 11.15—Talk: "Foreign Affairs."* 11.30—Orchestra. 12.05—Music.* 12.30—Music. 13.00—News. 13.20-13.45—Organ Recital.

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. "Tommy Tune's Tours." 14.22—John McCormack (Tenor).† 14.35—"Empire Exchange."* 14.50—Band. 15.30—Kathleen Dunn Davies (Pfte.). 16.00—Music. 16.30—News. 16.50-17.00—Light Music.†

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. "Food for Thought." 17.37—Dance Music. 18.00—News. 18.20—Arthur Jay (Baritone). 18.40—Variety. 19.00—Music. 19.20—The Story of the Telephone.* 20.00—George Parker (Baritone). 20.15—Symphony Orchestra. 21.20—News. 21.40—"Empire Magazine."* 22.10—Music.† 22.15—"Empire Exchange."* 22.30-22.45 — Dance Music.

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. Laurence Holmes (Baritone). 23.10—Science Talk.* 23.30 — Ruth George (Mezzo-soprano), David Wise (Violin). 00.00—Chamber Music. 00.40-01.00 News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. Orchestra. 02.30—"Food for Thought."* 02.50—Coronel and Falkland Islands. 03.40-04.00—News.

BOSTON, (*a*) 23.00—News.

EINDHOVEN, (*a*) 13.00-16.00—Variety.

MOSCOW, (*a,c*) 11.00—Talks (Eng.). 17.30 — Concert. 20.00 — Talks (Czech). 21.05 — Talks (Eng.). 22.00 — German Programme. (*b*) 23.00—Talks (Sp.). 00.00—News for the Americas (Eng., Ger.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Review. (*b*) 07.55—Records. 08.30—Topical; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Programmes. 11.00—Concert; at 12.00—News (Eng.); and at 12.45—News. 14.00—Books. 14.10—Economics. 14.20 — Markets. 14.30—Symphony Concert. Conductor: Tomasi. 15.55—Exchange. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert; at 18.30—News; Books. 19.30—News (Eng., It., Fr.). 20.30—To be announced. 22.40—News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—Breakfast Club. 14.45—Style and Shopping. 15.00—News; Music. 15.15—Jones. 15.30—Pepper Young. 15.45—Rhythm. 16.00 — Trail Finder. 16.15—Home. 16.30—Vic and Sade. 16.45—Edward MacHugh. 17.00—News. 17.15—Slim and Jack Gang. 17.30—Farm and Home. 18.30—Matinée. 19.30—Home Forum. 20.00—U.S. Marine Band. 21.00 — Alma Kitchell. 21.15—Utility Hall. 21.30—Tune Twisters. 21.45—Young Hickory. 22.00—For Children; at 22.15—Men of the West. 23.00—News. 23.45—Lowell Thomas. (*b*) 00.00—Variety. (*c*) 03.00—Variety. 03.30—Town Meeting. 04.00—News; Music; Bulletin; Minstrels. 04.30-06.00—Orchestras; at 05.00—Shandor (Violin).

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News: Talks; Patriotic Songs. 14.00-15.30—News (Eng.); Patriotic Songs; Organ; Mezzo-Soprano; Tenor; News. 16.30-17.30—News; Patriotic Songs; Piedmontese and Neapolitan Songs. 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 22.59—American Hour from Rome; News (Eng., It.); "Dafni"—Opera (Mulè); Talk; Songs.

RUYSSELEDE, 18.30 — Records. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Mrs. Wiggs of the Cabbage Patch. 15.15—John's other Wife. 15.30—Plain Bill. 15.45—To-day's Children. 16.00—David Harum. 16.15—Backstage Wife. 16.30—Charm. 16.45—Experience. 17.00—Girl Alone. 17.15—Mary Marlin. 17.30—Farm Programme. 18.00—White (Tenor). 18.15—High Hatters. 18.30—Harding's Wife. 18.45—Happy Jack. 19.00—Dr. Maddy's Band Lessons. 19.30—Soprano. 19.45—Old Refrain. 20.00—Pepper Young. 20.15—Ma Perkins. 20.30—Vic and Sade. (*b*) 21.00—Orchestra. 21.30 — Republican Committee. 21.45—Stocks. 22.00—Logan's Musicale. 22.15—Tom Mix. 22.30—Jack Armstrong. 22.45—Axton (Tenor). 23.00—Flying Time. 23.15—Dennis (Tenor). 23.30—News; Songs. 23.45—Bridge. 00.00—Amos 'n' Andy. 00.15—Uncle Ezra. 00.30—Sports; Stocks. 00.50—News (Sp.). 01.00—Latin-American Concert. 02.00—Town Hall. 03.00—Hit Parade. 04.00-05.00—Orchestras.

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45 — From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (Sp.). (*b*) 19.00—See 15.30.

WARSAW, 17.30-18.30—Programme in French: Music and News; Polish Music. In the interval: Talk.

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News; Music. 07.00—News (Eng.). 07.15—Topical. 07.30—Newcomers. 08.15—Opera Music. 09.30—News. 09.45—Band.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); at 12.00—News (Eng.). 13.00—News and Call (DJQ). 13.15—Talk. 13.30—Violin Sonata (Brahms). 14.00—News (Eng., Dutch). 14.15—Topical; Music. 15.30 — Songs (Schubert) 15.45—For Women.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.); For Hitler Youth. 17.15—News; Books. 17.45—Variety. 19.00—News (Eng.); Topical. 19.30—Concert. 20.15—Chamber Music. 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN), 21.50—Call (Ger., Sp.). 22.00—Songs. 22.45—News; Talk; Music. 00.15—News (Sp.). 00.30—Greetings (Sp.); Trio. 01.15 — Topical. 01.30—For Youth. 02.00—News. 02.15—Musical Riddles. 03.30—News (Sp., Ger.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.); Songs. 22.45—

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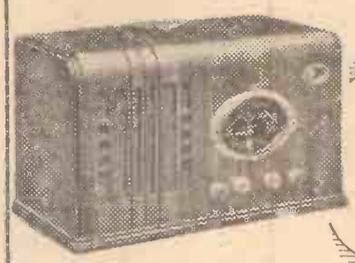

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News; Talk. 23.15—Music. 00.15—Topical. 00.30-Chamber Orchestra. 01.15—News (Eng.). 01.30—For Young People. 02.00—News. 02.15—Musical Riddles. 03.30—News (Sp.).

THURSDAY, Nov. 5

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. Cinema Organ. 07.45—"Food for Thought."* 08.05—Dance Music.* 08.35—"Fireworks for the Fifth!" 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. Musical Play.* 12.02—Cinema Organ. 12.25—"Food for Thought."* 12.45—Songs. 13.00—News. 13.20-13.45—Antonia Butler ('Cello).

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. Welsh Songs. 14.30—Orchestra. 15.30—Talk: "Under Big Ben." 15.45—Band. 16.30—News. 16.50-17.00—Dance Music.†

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. "Fireworks for the Fifth!"* 17.37—Dance Music. 18.00—News. 18.20—Military Band, Tudor Davies (Tenor). 19.00—Talk: "Under Big Ben."* 19.15—Cedric Sharpe ('Cello). 19.30—"Radio Pie." 20.15—Orchestra. 21.00—News. 21.20—Murray Ashford and Edgar Sawyer (Entertainers). 21.30—"Gunpowder Treason." 22.00—Light Music.† 22.15—Talk: "Under Big Ben."* 22.30-22.45—Dance Music.

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. Quintet.* 23.30—"Empire Magazine."* 00.00—Margaret Good (Pfte.). 00.15—Reading. 00.30—Instrumental Recital. 00.40-01.00—News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. Cinema Organ. 02.25—Talk: "Under Big Ben."* 02.40—Musical Play.* 03.40-04.00—News.

BOSTON, (*a*) 23.00—News.

EINDHOVEN, (*b*) 00.00-03.00—Variety.

HUIZEN, 12.30—Anthem; Call; Music. 12.40—News. 12.55—'Cello. 13.10—Talk. 13.30—'Cello. 13.45—Music; Talk. 14.20-14.30—Dance Music.

MOSCOW, (*a, c*) 17.30—Concert. 20.00—Talk (Ger.). 21.05—Talks (Fr.). 22.00—Talks (Sp., Port.). (*b*) 23.00—Talk (Sp.). 00.00—News for the Americas (Eng.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Review. (*b*) 07.55—Records. 08.30—Review; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Programmes. 11.00—Concert; at 12.00: News (Eng.). at 12.45: News. 14.00—Foreign Affairs. 14.10—Music Talk. 14.20—Markets. 14.30—Pfte., Violin, Vocal Quartet. 15.55—Exchange. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert. 18.30—News; Talk. 19.00—Records. 19.30—News (Eng., It., Fr.). 20.45—Concert. 22.45—News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.); Talk. 01.30—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—Breakfast Club. 14.45—Style and Shopping. 15.00—News; Music. 15.15—Jones. 15.30—Pepper Young. 15.45—Rhythm. 16.00—Neighbour Nell. 16.15—Home. 16.30—Vic and Sade. 16.45—Edward MacHugh. 17.00—News. 17.30—Farm and Home. 18.30—Slim and Jack Gang. 18.45—Pen Women. 19.30—Home Forum. 20.00—Penna. Women. 20.15—Dance. 20.30—Light Opera Hour. 21.30—Anne Muenchen. 21.45—Young Hickory. 22.00—For Children; at 22.15: Bette Smiley. 23.00—News. 23.15—Thank you, Stusia. 23.30—Weather. 23.45—Lowell Thomas. (*b*) 00.00—Variety. 01.00—NBC Jamboree. 02.00—Union Station. 02.30—Orchestra. (*c*) 03.00—Tenth Anniversary Programme. 04.00—News; Bulletin. 04.15—Arm Chair Driver. 04.30-06.00—Orchestras; at 05.00: Shandor (Violin).

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News; Talks; Symphony Music. 14.00-15.30—News (Eng., Jap.); "Dafni"—Opera (Mulè); News. 16.30-17.30—News; Organ Jazz; Poems; Songs. 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 23.30—Call (It., Sp., Port.); News; "Rigoletto" (Verdi); Topical; Songs; News (Sp., Port.).

RUYSSELEDE, 18.30—From Brussels 2. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Mrs. Wiggs of the Cabbage Patch. 15.15—John's other Wife. 15.30—Plain Bill. 15.45—To-day's Children. 16.00—David Harum. 16.15—Backstage Wife. 16.30—Dream Singer. 16.45—Wife Saver. 17.00—Girl Alone. 17.15—Mary Marlin. 17.30—Arnold's Cadets. 17.45—Farm Programme. 18.15—High Hatters. 18.30—Harding's Wife. 18.45—Happy Jack. 19.00—Braggiotti and Sheffter with NBC Concert Orchestra. 19.15—Norsemen Quartet. 19.30—Soprano and Orchestra. 20.00—Pepper Young. 20.15—Ma Perkins. 20.30—Vic and Sade. (*b*) 21.00—Morrell's. 21.30—Republican Committee. 21.45—Stocks. 22.00—While the City sleeps. 22.15—Tom Mix. 22.30—Jack Armstrong. 22.45—Tune Twisters. 23.00—Flying Time. 23.15—Dennis (Tenor). 23.30—News; Stocks. 00.00—Amos 'n' Andy. 00.15—Experience. 00.30—Science Forum. 01.00—Rudy Vallee. 02.00—Showboat. 03.00—Bing Crosby. 04.00—Sport Shots. 04.15-05.00—Orchestras.

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45—From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (Fr.). (*b*) 19.00—See 15.30.

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News; Music. 06.55—Greetings to Australia. 07.00—News (Eng.). 07.15—Topical. 07.30—For Women. 07.45—Songs (Schubert). 08.00—Orchestra. 08.45—Concert. 09.30—News. 09.45—For Young People.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); Music; at 12.00: News (Eng.). 13.00—News and Call (DJQ). 13.15—Folk Songs and Dances. 14.00—News (Eng., Dutch). 14.15—Topical. 14.30—Variety. 15.45—Books.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.). 16.45—For Hitler Youth. 17.00—Talk. 17.15—News; Music. 18.00—Excerpts, "Wallensteins Tod" (Schiller). 19.00—News (Eng.); Topical. 19.30—Folk Songs; Band. 20.45—Talk. 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN), 21.50—Call (Ger., Sp.). 22.00—Topical. 22.15—Concert. 22.45—News; Talk. 23.15—Scenes, "Wallensteins Tod" (Schiller). 00.15—News (Sp.). 00.30—Folk Songs and Dances. 01.15—Topical. 01.30—For Youth. 01.45—Discussion (Sp.). 02.00—News. 02.15—Quartet. 03.30—News (Sp., Ger.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.); Books. 22.15—Music. 22.45—News; Talk. 23.15—Scenes, "Wallensteins Tod" (Schiller). 00.15—Topical. 00.30—Folk Songs and Dances. 01.15—News (Eng.). 01.30—For Young People. 01.45—Talk. 02.00—News. 02.15—Quartet. 03.30—News (Sp.).

FRIDAY, November 6

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. Arthur Catterall (Violin).† 07.25—Reading. 07.40—Orchestra. 08.40—Talk: "Under Big Ben."* 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. Songs.† 11.15—Talk: "Under Big Ben."* 11.30—Cinema Orchestra. 11.55—"Fireworks for the Fifth!"* 12.15—Pfte. solos (Paderewski).† 12.30—Dance Music. 13.00—News. 13.20-13.45—Operatic Arias.†

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. Coronel and Falkland Islands.* 14.52—Bernard Davis (Viola). 15.15—Science Talk.* 15.35—Scottish Dance Music. 16.00—"What's the Odds?" 16.30—News. 16.50-17.00—Hungaria Gypsy Orchestra.

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. Music. 17.45—"Music of the Hours."* 18.00—News. 18.20—Music.† 18.25—Recital. 19.00—Musical Play.* 20.00—"White Coons"; Harry S. Pepper, Doris Arnold (Pfte.). 21.00—News. 21.20—Stephen Wearing (Pfte.). 21.40—Theatre Organ. 22.00—Talk. 22.20-22.45—Scottish Dance Music.*

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. Students' Songs.† 23.10—Talk.* 23.30—Symphony Concert. 00.30—Round and About. 00.40-01.00—News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. "Empire Magazine."* 02.31—Henry Bronkhurst (Pfte.). 02.40—Marines Band; Winifred Kaye (Contralto). 03.40-04.00—News.

BOSTON, (*a*) 23.00—News. (*b*) 00.00-02.00—"Poland"—Talks and Music.

HUIZEN, 12.30—Anthem; Call. 12.35—Music. 12.40—News; Music. 13.15—Talk; Music. 14.00—Talk. 14.20-14.30—Music.

MOSCOW, (*a, c*) 17.30—Concert 20.00—Talks (Czech.). 21.05—Talks (Eng.). 22.00—Talk (Ger.). (*b*) 23.00—Talk (Sp.). 00.00—News for the Americas (Eng., Ger.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Foreign Affairs. (*b*) 07.55—Records. 08.30—Home Affairs; Records. 09.15—News. 09.45—News (Eng.). (*a*) 10.55—Notes. 11.00—Concert; at 12.00—News (Eng.); and at 12.45—News. 14.00—Talks. 14.20—Markets. 14.30—"Le devin du village"—Opéra-comique (Rousseau). 15.55—Exchange. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert; at 18.30—News; Talk. 19.30—News (Eng., It., Fr.). 20.30—"Mary Tudor"—Play (Victor Hugo), from Paris (PTT). 22.40—News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 05.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—Breakfast Club. 14.45—Style and Shopping. 15.00—News; Music. 15.15—Jones. 15.30—Pepper Young. 15.45—Rhythm. 16.00—Herman and Banta. 16.15—Home. 16.30—Vic and Sade. 16.45—Edward MacHugh. 17.00—News. 17.15—Slim and Jack Gang. 17.30—Farm and Home. 18.30—Home Forum. 19.00—NBC Music Appreciation Hour. 20.00—Davies (Baritone). 20.15—Soprano. 20.30—Variety. 21.15—Utility Hall. 21.30—Ensemble. 21.45—Young Hickory. 22.00—For Children; at 22.15—Dance. 23.00—News. 23.30—Baseball. 23.45—Lowell Thomas. (*b*) 00.00—Variety; at 00.15—John B. Kennedy. (*c*) 03.00—Radio Guide. 03.30—W.P.A. 04.00—News. 04.15—Minstrels. 04.30-06.00—Orchestras; at 05.00—DX Club.

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News; Talks; Pfte. 14.00-15.30—News (Eng.). Variety; Talk; Italian and Neapolitan Songs; News. 16.30-17.30—News; Choirs; Folk Songs. 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 22.59—American Hour from Rome. News (Eng., It.); "Rigoletto" (Verdi); Talk; Songs.

RUYSSELEDE, 18.30—From Brussels 1. 19.00—Records. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Mrs. Wiggs of the Cabbage Patch. 15.15—John's other Wife. 15.30—Plain Bill. 15.45—To-day's Children. 16.00—David Harum. 16.15—Backstage Wife. 16.30—Charm. 16.45—Experience. 17.00—Girl Alone. 17.15—Mary Marlin. 17.30—Farm Programme. 18.00—White (Tenor). 18.15—High Hatters. 18.30—Harding's Wife. 18.45—Happy Jack. 19.00—NBC Music Appreciation Hour. 20.00—Pepper Young. 20.15—Ma Perkins. 20.30—Vic and Sade. (*b*) 21.00—For Women. 21.30—Republican Committee. 21.45—Stocks. 22.00—Rhythm. 22.15—Tom Mix. 22.30—Jack Armstrong. 22.45—Tenor. 23.00—Flying Time. 23.15—Norsemen Quartet. 23.30—News; Spanish Programme. 00.00—Amos 'n' Andy. 00.15—Bridge. 00.30—Stocks. 00.50—News (Sp.). 01.00—Concert. 01.30—Farm Forum. 02.00—Variety. 04.00—George R. Holmes. 04.15-05.00—Orchestra; Crawford (Organ).

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45—From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (It.). (*b*) 19.00—Religious Notes (Ger.).

WARSAW, 17.30-18.30—Music; For Poles Abroad; Silesian Songs; Reading; Chopin.

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.); Music. 06.00—News; Music. 06.55—Greetings to New Zealand. 07.00—News (Eng.). 07.15—Topical. 07.30—Band. 08.30—Scenes, "Wallensteins Tod" (Schiller). 09.30—News; Music.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); Music; at 12.00—News (Eng.). 13.00—News and Call (DJQ). 13.15—Songs. 14.00—News (Eng., Dutch). 14.15—Topical. 14.30—For Hitler Youth. 14.45—For Germans Abroad. 15.00—Folk Songs. 15.15—Orchestra.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.); For Women. 17.15—News; Talk. 17.45—Orchestra. 19.00—News (Eng.); Topical. 19.30—"Die Frauen um Liszt"—Play with Music. 20.30—Trio (Beethoven). 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN) 21.50—Call (Ger., Sp., Port.). 22.00—Talk. 22.15—Trio: Variations (Beethoven). 22.45—News; Variety. 23.00—Variety. 00.15—Topical. 00.30—News (Sp., Port.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.). 22.00—Talk. 22.15—Trio: Variations (Beethoven). 22.45—News. 23.00—Variety. 00.15—Topical. 00.30—"Die Frauen um Liszt"—Play. 01.30—News (Eng.). 01.45—Folk Songs. 02.00—News; Orchestra. 03.30—News (Sp.).

SATURDAY, Nov. 7

EMPIRE

Transmission 1 (GSO, GSB), 07.15—Big Ben. The Sea.† 07.50—Talk.* 08.10—Songs. 08.25—"What's the Odds?"* 08.55-09.15—News.

Transmission 2 (GSH, GSF), 11.00—Big Ben. Scottish Dance Music.* 11.25—Orchestra.† 11.55—"Tommy Tune's Tours."* 12.15—Peggy Male (Pfte.). 12.40—The Children's Hour. 13.25-13.45—News.

Transmission 3 (GSH, GSF, GSB), 14.00—Big Ben. "Empire Magazine."* 14.31—Theatre Orchestra. 15.00—Theatre Organ. 15.30—Music.* 15.55—Dance Music.* 16.30—News. 16.50-17.00—Songs.†

Transmission 4 (17.15-21.00 GSI, GSD, GSB; 21.05-22.45 GSF, GSD, GSB), 17.15—Big Ben. The Children's Hour. 18.00—News. 18.25—Quintet; Linda Seymour (Soprano). 19.00—Dance Music. 19.30—"In Town To-night." 20.00—Jean Houston (Soprano), Alexander Carmichael (Baritone). 20.30—"What's the Odds?"* 21.00—News. 21.20—Music Hall. 22.20—Announcements. 22.25-22.45—Dance Music.

Transmission 5 (GSP, GSD, GSC), 23.00—Big Ben. Dance Music. 23.30—"What's the Odds?"* 00.00—Noel Coward.† 00.11—Welsh Songs.* 00.40-01.05—News.

Transmission 6 (GSD, GSC), 02.00—Big Ben. Arthur Fear (Baritone). 02.25—Talk. 02.40—Scottish Dance Music.* 03.05—"Fireworks for the Fifth!"* 03.25—"Two in a Bar."* 03.40-04.05—News.

BOSTON, (*a*) 22.00—"Geology"—Talks and Sketch. 22.30—Talks: (a) Basic English, (b) Books. 23.00—News.

HUIZEN, 12.30—Anthem; Call. 12.35—Troubadours. 12.40—News; Troubadours. 13.15—Newcomers. 13.30—Mail; Troubadours. 14.00—News. 14.20-14.35—Troubadours.

MOSCOW, (*a, c*) 17.30—Concert. 20.00—Talks (Ger.). 21.05—Talks (Fr.). 22.00—Talk (Sp.). (*b*) 23.00—Talks (Sp.). 00.00—News for the Americas (Eng.).

PARIS (Radio-Colonial), (*a, b*) 07.00—News; Records; Review. (*b*) 07.55—Records. 08.30—Review; Records. 09.15—News (Fr.). 09.45—News (Eng.). (*a*) 10.55—Programmes. 11.00—Concert; at 12.00: News (Eng.), and at 12.45: News. 14.00—Talks. 14.20—Markets. 14.30—Light Music. 15.55—Exchange. (*b*) 17.15—News (Fr., Arabic). 18.00—Concert. 18.30—News; Review. 19.00—Records. 19.30—News (Eng., It., Fr.). 20.30—To be announced. 22.30—Topical; News (Port.). (*c*) 23.15—Concert. 00.15—News (Fr., Sp.). 01.00—News (Eng.). 01.15—Records or Play. 03.45—News. 04.20—News (Eng., Sp.). 04.40—Records or Play. 04.45—News (Ger.).

PITTSBURGH, (*a*) 14.00—Breakfast Club. 15.00—News; Music. 15.15—Strings. 15.30—Josh Higgins. 15.45—Originalities. 16.00—Sammy Fuller. 16.45—Strings. 17.00—News. 17.15—Slim and Jack Gang. 17.30—Farm and Home. 19.30—Ensemble. 20.00—High Hatters. 20.15—Gale Page. 20.30—Orchestras. 21.30—Joan's Escorts. 21.45—Ensemble. 22.00—Cadets' Quartet. 22.15—Timothy Makepeace. 22.30—Recreo; Y.M.C.A. 22.45—Ruth and Ross. 23.00—News. 23.30—Baseball. 23.45—Band. (*b*) 00.00—Message of Israel. 00.30—Uncle Jim. 01.00—El Chico Spanish Revue. 01.30—Orchestra. 01.45—Dr. Clausen. 02.00—Barn Dance. (*c*) 03.00—Variety. 04.00—News. 04.15-06.00—Orchestras.

RIO DE JANEIRO, 22.30—News. 23.00—Talks (Eng., etc.).

ROME, (*a*) 13.15—News; Talks; Organ. 14.00-15.30—News (Eng., Hind.); Trio; Light Music; News. 16.30-17.30—News; "Rigoletto" (Verdi). 17.40—Music and News (Arabic). 18.00—News (Ger.). 18.21—News (Eng.). 18.44—News (Fr.). 19.05-22.15—From Rome (420.8 m.). 23.20—Call (It., Sp., Port.). News; Band; Topical; News (Sp., Port.).

RUYSSELEDE, 18.30—Records. 19.30—News (Flem., Fr.).

SCHENECTADY, (*a*) 14.55—News. 15.00—Charioteers. 15.15—Vass Family. 15.30—Manhatters. 16.00—American Schools. 16.15—Sweethearts. 16.30—Mystery Chef. 16.45—Sketch. 17.00—Chasin's Music Series. 17.30—Farm Programme. 18.00—Stocks. 18.15—Concert Ensemble. 18.30—Miniatures. 19.00—Orchestras. 20.00—Variety. 20.30—Weekend Revue. (*b*) 21.00—Revue. 21.30—Continentals. 22.00—Blue Room Echoes. 22.30—Kindergarten. 23.00—Orchestra. 23.30—News; Contralto. 23.45—Art of Living. 00.00—Football. 00.15—Heinie's Grenadiers. 00.30—Stocks. 01.00—Variety. 04.00—Sport Shots. 04.15-05.00—Orchestras.

SKAMLEBAEK, 18.00 till Close—Kalundborg Programme.

SOFIA, 17.00-19.45—From Sofia (352.9 m.).

SUVA, 05.30-06.30—Records.

VATICAN CITY, (*a*) 15.30—Religious Notes (It.). (*b*) 19.00—Religious Notes (Dutch).

ZEESEN (DJA, DJB), 05.05—Call (Ger., Eng.). 05.10—Concert; at 06.00: News. 07.00—News (Eng.). 07.15—Topical. 07.30—"Die Frauen um Liszt"—Play with Music. 08.30—Dance Music. 09.30—News. 09.45—For Women.

ZEESEN (DJA, DJB, DJE, DJQ), 10.55—Call (Ger., Eng.); Music; at 12.00: News (Eng.). 13.00—News and Call (DJQ). 13.15—Trio Variations (Beethoven). 13.45—Legal Talk. 14.00—News (Eng., Dutch). 14.15—Topical. 14.30—Scenes, "Wallensteins Tod" (Schiller). 15.30—For Women.

ZEESEN (DJD, DJL, DJC), 16.35—Call (Ger., Eng.); Reading. 17.00—Reger Pfte. Music. 17.15—News; Baritone. 17.45—"Die Weltmeisterin" (Snaga). 19.00—News (Eng.); Topical. 19.30—Roving Microphone. 20.00—Ballet Suite (Sommerfeld). 21.00—News (Ger., Eng.).

ZEESEN (DJA, DJN), 21.50—Call (Ger., Sp.). 22.00—For Women. 22.30—Talk. 22.45—News. 23.00—"Die Weltmeisterin"—Operetta (Snaga). 00.15—News (Sp.). 00.30—Band. 01.15—Topical. 01.30—Variety. 02.00—News. 02.15—Dance Music. 03.30—News (Sp., Ger.).

ZEESEN (DJD, DJC), 21.50—Call (Ger., Eng.). 22.00—For Women. 22.30—Legal Talk. 22.45—News. 23.00—"Die Weltmeisterin"—Operetta (Snaga). 00.15—Topical. 00.30—Band. 01.15—News (Eng.). 01.30—Roving Microphone. 02.00—News. 02.15—Dance Music. 03.30—News (Sp.).

November 1 SUNDAY

12 noon

BERLIN and **MOST GERMAN STATIONS**, Light Music.
FRANKFURT and **DEUTSCHLANDSENDER**, Hauck Band.
HILVERSUM (1,875 m.), K.R.O. Orchestra. **HILVERSUM** (301.5 m.), A.V.R.O. Orchestra. Songs.
MUNICH, Orchestra.
PARIS (PTT), Light Orchestral. 12.45—News.
RADIO-PARIS, 12.15—Pasdeloup Concert Orchestra. 12.30—Roman Catholic Address. 12.50—News.

1 p.m.

BERLIN, Strauss and Wagner Records. **BRESLAU**, News; For Women. 1.30—Notes. 1.50—Variety. **BRUSSELS (1)**, News. 1.10—Radio Orchestra. 1.30—Records. **BRUSSELS (2)**, News. 1.10—Salon Orchestra. 1.30—Organ.
COLOGNE, Light Music—Quintet. 1.30—Hints; Topical.
DEUTSCHLANDSENDER, Play. 1.30—Brazilian and Japanese Folk Songs Records. 1.50—Talk.
FRANKFURT, See Stuttgart. 1.45—Stories.
HAMBURG, Dialect Play, with Music. **HILVERSUM** (1,875 m.), K.R.O. Orchestra. 1.40—Questions and Answers. **HILVERSUM** (301.5 m.), Orchestra and Songs. 1.10—Talk. 1.40—Football Match, Holland v. Norway.
KÖNIGSBERG, Chess. 1.30—Talk. 1.45—Records.
LEIPZIG, 1.5—Talk. 1.25—Fairy Play. 1.50—Light Music.
MUNICH, Fairy Story. 1.45—Trio (Gade).
PARIS (PTT), Light Orchestral.
PRAGUE, 1.30—"Tales of Hoffman"—Opera (Offenbach).
RADIO-PARIS, Orchestra (contd.). Rey (Songs).
STUTTGART, Fairy Plays. 1.45—From Shops and Workshops.

2 p.m.

ATHLONE, Records.
BERLIN, From the Kurmark. 2.30—Kurmark Theatre Performances with Records. **BRESLAU**, Variety. 2.30—Play. **BRUSSELS (1)**, Art Notes; Schnyders Orchestra. **BRUSSELS (2)**, 2.15—Jazz.
COLOGNE, 2.10—Düsseldorf Madrigal Society. 2.45—German.
DEUTSCHLANDSENDER, Variety.
FRANKFURT, For Country People.
HAMBURG, Brazilian and Japanese Folk Song Records. 2.20—Schubert Pfte. Music. 2.45—Second Half of the Rugby Match, Germany v. France. **HILVERSUM** (1,875 m.), Questions and Answers. 2.10—K.R.O. Symphony Orchestra. Josef Wagner (Pfte.); Records. **HILVERSUM** (301.5 m.), Football Match (contd.).
KALUNDBORG, 2.25—Fourth People's Concert. Orchestra, Guest Conductor: Malko. Rena Madsen (Songs). Schiøler (Pfte.). **KÖNIGSBERG**, Records. 2.10—For Women; Topical. 2.45—See Hamburg.
LEIPZIG, Music (contd.). 2.40—Talk.
MUNICH, 2.5—All Saints' Day Concert. 2.40—War Reminiscences.
PARIS (PTT), Records. **POSTE PARISIEN**, 2.45—Second Half of the Rugby Match, Germany v. France, at Hanover. **PRAGUE**, Opera (contd.).
RADIO-PARIS, For Young People. **ROME** and **TURIN**, 2.30—Football Match.
STUTTGART, Brazilian and Japanese Folk Song Records. 2.20—Lute. 2.30—Choir.

3 p.m.

ATHLONE, Records.
BRUSSELS (1), Records: "The Dusk of the Gods" (Wagner). **BRUSSELS (2)**, Topical. 3.15—Schnyders Orchestra.
COLOGNE, Variety—Orchestra, Choir.
DEUTSCHLANDSENDER, Records.
FRANKFURT, Orchestra.
HAMBURG, Rugby Match (contd.). 3.25—Concert from Saarbrücken. **HILVERSUM** (1,875 m.), Orchestra and Pfte. (contd.). 3.40—For Hospitals. **HILVERSUM** (301.5 m.), Football Match (contd.). 3.40—Dance Band.
KALUNDBORG, Concert (contd.).
KÖNIGSBERG, See Hamburg. 3.25—Popular Music.
LEIPZIG, Variety.
PARIS (PTT), Symphony Concert. **POSTE PARISIEN**, 3.0-3.25—Rugby Match (contd.). **PRAGUE**, Opera (contd.).
RADIO-PARIS, Porée Orchestra and Songs. **ROME** and **TURIN**, Football Match. 3.15—Sports, Records. 3.30—Orchestra.
STUTTGART, **BERLIN**, **BRESLAU**, **MUNICH**, Light Music from Saarbrücken.

4 p.m.

BEROMÜNSTER, "Helvetia" Choral Society. **BRUSSELS (1)**, Quartets (Mozart, Roesgen-Champion and Lalo) by the Blondel Quartet. **BRUSSELS (2)**, Records: "Iolanthe" (Sullivan).
COLOGNE, Variety (contd.).
DEUTSCHLANDSENDER, Records. 4.30—Sequence.
FRANKFURT, Orchestra.
HILVERSUM (1,875 m.), For Hospitals. 4.35—Sports. 4.40—Women's Choir, Organ. **HILVERSUM** (301.5 m.), Dance Band. 4.25—News, Records. 4.40—V.A.R.A. Orchestra.
KALUNDBORG, Service. **KÖNIGSBERG**, Popular Music.
LEIPZIG, Variety.
MORAVSKÁ-OSTRAVA, 4.50—Orchestra. Conductor: Kretschmar. Songs, Pfte. (Bach, Mozart).
PARIS (PTT), Symphony Concert. **PRAGUE**, Opera (contd.). 4.10—Poems; Records. 4.35—Talks (German). 4.50—See Moravská-Ostrava.
RADIO-PARIS, Orchestra, Songs (contd.). **ROME** and **TURIN**, Orchestra.
STUTTGART, **BERLIN**, **BRESLAU**, **HAMBURG**, **MUNICH**, Light Music (contd.).
VIENNA, Orchestra. Steiner (Violin).
WARSAW, Symphony Concert. Orchestra and Pfte. (Handel, Beethoven, Grétry, Mahler).

5 p.m.

BERLIN, Composers in a Programme of their own Music. 5.50—Quintet in C (Pfitzner). **BEROMÜNSTER**, "Helvetia" Choral Society. 5.30—Käthe Kruse. **BRESLAU**, Talk. 5.20—Ottka (Pfte.). 5.50—Sports. **BRUSSELS (1)**, Football Report. 5.10—Joseph Delporte (Organ). 5.30—Play for Children. **BRUSSELS (2)**, Dance Band. At 5.30—Sports. **BUDAPEST (1)**, Requiem (Verdi) from the Opera.
COLOGNE, For Ex-Servicemen. 5.30—November Calendar.
DEUTSCHLANDSENDER, Orchestra.
FRANKFURT, Hitler Youth Music. 5.30—Records.
HAMBURG, "Gutenburg"—Play with Music. 5.45—Dance Band. **HILVERSUM** (1,875 m.), Choir (contd.). 5.10—Records. 5.30—Service. **HILVERSUM** (301.5 m.), Orchestra (contd.). 5.35—News. 5.40—Commemoration Programme.
KALUNDBORG, Service (contd.). 5.20—Talk. **KÖNIGSBERG**, Music. 5.10—November Calendar. 5.40—Sequence with Music.
LEIPZIG, Reading. 5.20—Weber Concert—Vocal and Instrumental.
MONTE CENERI, 5.15—Old Italian Arias—Songs, Harpsichord. 5.45—Sports. **MORAVSKÁ-OSTRAVA**, Orchestra, etc. (contd.). **MUNICH**, Talk. 5.20—Orchestra, Contralto.
OSLO, 5.30—Violin and Pfte.
PARIS (PTT), Records. 5.30—"Le miracle de l'enfant Bavard"—Play (Ghéon). **POSTE PARISIEN**, 5.30—Records. **PRAGUE**, See Moravská-Ostrava. 5.50—News (German), Record.
RADIO-PARIS, To be announced. **ROME** and **TURIN**, Orchestra. 5.30—Sports, Records.
SOTTENS, Mendelssohn. Radio Suisse romande Orchestra. **STOCKHOLM**, Scandinavian Music—Orchestra and Songs. **STRASBOURG**, Service for the Dead in German, and Two Cantatas (Bach). **STUTTGART**, Reading and Records. 5.40—London Philharmonic Records.
VIENNA, Orchestra and Violin
WARSAW, Topical, Concert (contd.).

6 p.m.

BERLIN, Quintet (contd.). 6.40—Sports. **BEROMÜNSTER**, Religious Address. 6.30—News. 6.45—Orchestra. **BRESLAU**, Sports. 6.15—Hungarian Folk Songs. **BRATISLAVA**, 6.5—"Death in Slovak Folk Songs." 6.20—"Herod" Poem (Vajansky). **BRNO**, 6.20—"Moravian Country Bells"—Sequence of Laments and Ballads.
BRUSSELS (1), 6.5—Talk and Recitations. 6.15—Records: Negro Spirituals. 6.30—Adrienne Dulait (Pfte.). 6.45—Records. **BRUSSELS (2)**, Salon Orchestra, Songs. 6.45—Address. **BUDAPEST (1)**, "Requiem" (contd.).
COLOGNE, November Calendar. 6.25—Hockey Report. 6.35—Opening of the Skating Rink, Dortmund. 6.50—Sports.
DEUTSCHLANDSENDER, "Walter Kollo"—Musical Sequence. 6.40—Sports.
FRANKFURT, "Homesickness"—Sequence with Music. 6.50—Sports.
HAMBURG, Dance Band. 6.35—Notes. **HILVERSUM** (1,875 m.), Service (contd.); Sacred Music. **HILVERSUM** (301.5 m.), Commemoration Programme. 6.10—Records. 6.25—Service.
KALUNDBORG, News. 6.30—Talk. **KÖNIGSBERG**, Sequence (contd.). 6.40—Sports.
LEIPZIG, Dialect Sequence with Music. 6.55—Sports.
MONTE CENERI, Sports. 6.15—Records. 6.45—News. **MUNICH**, Orchestra, Contralto. 6.35—Call of Youth; Sports.
OSLO, Violin and Pfte. 6.10—News. 6.30—Reading. 6.55—Records.
PARIS (PTT), Play (contd.). 6.30—News. **POSTE PARISIEN**, Records. **PRAGUE**, News. 6.5—All Saints' Day Programme. 6.20—See Brno.
RADIO-NORMANDIE, Light Music. 6.15—Records. 6.30—Concert. **RADIO-PARIS**, To be announced. **ROME**, 6.20—Notes. 6.30—Records.
SOTTENS, Roman Catholic Address. 6.30—Variations on a Folk Theme (Ochs). 6.50—News. **STOCKHOLM**, Music (contd.). 6.15—News. 6.30—"London Wall"—Comedy (John van Druten). **STRASBOURG**, Service and Cantatas (contd.). 6.30—Topical. **STUTTGART**, Records (contd.). 6.10—Rugby Match, Germany v. France; Sports. 6.40—"Don Giovanni"—Opera (Mozart).
TURIN, 6.20—Notes; Records.
VIENNA, Notes. 6.10—"Twilight Dreams"—Fantasia on Records.
WARSAW, Act II, "Les Noces"—Play (Wyspianski). 6.45—"In Memoriam"—From the Tomb of the Unknown Warrior.

7 p.m.

BEROMÜNSTER, Orchestra (contd.). 7.15—"Brugge boue"—Play (Felix) **BRESLAU**, Talk. 7.20—"Rübezahl"—Play (Kaergel), Music by Sczuka. **BRUSSELS (1)**, Notes. 7.15—To be announced. 7.30—News. **BRUSSELS (2)**, Norah Scott Turner (Songs). 7.30—Films. **BUCHAREST** and **RADIO-ROMANIA**, "Viforul"—Historical Play (Delavrancea). **BUDAPEST (1)**, "Requiem" (contd.). 7.10—Talk. 7.30—Opera Orchestra (Gluck, Strauss and Liszt).
COLOGNE, Orchestra, Pfte., Flute, 'Cello.
FRANKFURT, Orchestra, Songs, Oboe (Handel, Wagner, etc.).
HAMBURG and **DEUTSCHLANDSENDER**, Second Peoples' Concert from the Musikhalle. Orchestra, Casadesus (Pfte.), Jakschtat (Baritone) (Mozart, Strauss, Liszt, Berlioz). **HILVERSUM** (1,875 m.), Sacred Music. 7.25—Sports; Address; News. **HILVERSUM** (301.5 m.), Service (contd.). 7.40—News. 7.55—A.V.R.O. Orchestra. Van Raalte. Spalding (Violin).
KALUNDBORG, Sketch. 7.15—Danish Songs. "Bel Canto" Male Voice Choir. 7.40—"Don Quixote" (Cervantes)—Talk and Reading. **KÖNIGSBERG**, Historical Marches.
LEIPZIG, **BERLIN**, Leipzig Symphony Orchestra, Choir, Songs.
MONTE CENERI, Requiem Mass (Perosi), Concordia Choir. 7.30—Poems. 7.45—Organ. **MUNICH**, Symphony Concert. Conductor: Winter. Carola Farma, Marius Andersen, Gustav Havemann.
OSLO, Records. 7.10—Talk. 7.30—"Down the Rhine"—Dialogue Sequence with Choir and Orchestra.
PARIS (PTT), News. 7.45—Lydia Chaliapin-Jean Rieux Programme. **POSTE PARISIEN**, News. 7.25—Records. 7.50—Frères Jacasse. 7.55—Record. **PRAGUE**, Talk. 7.5—Requiem (Verdi). Czech Philharmonic. Conductor: de Sabata. Hlahol Vocal Ensemble and Others.
RADIO-NORMANDIE, Records. 7.15—Light Music. 7.30—Concert; at 7.40, News. **RADIO-PARIS**, Bilboquet and Troupe. 7.30—The Bayan Singers. **ROME**, 7.5—News. 7.30—Sports; Records. 7.40—Talk. 7.45—"Conchita"—Opera (Zandonai). Conductor: The Composer.
SOTTENS, Sports. 7.20—"Faust"—Opera (Gounod). **STOCKHOLM**, "London Wall" (contd.). **STRASBOURG**, Topical. 7.15—Records. 7.30—News (French, German). **STUTTGART**, Opera (contd.).
TURIN, 7.5—News. 7.30—Records. 7.40—"Partenza per l'Asia"—Play (d'Ambra).
VIENNA, Ballad. 7.10—"Gevatter Tod"—Play (Soeser).
WARSAW, "In Memoriam" (contd.). 7.15—News.

8 p.m.

ATHLONE, 8.15—"The Singer," from the Gate Theatre, Dublin.
BEROMÜNSTER, "Play" (contd.). 8.15—Talk with Music: Liszt's Stay in Switzerland. **BRESLAU**, Play (contd.). **BRUSSELS (1)**, Radio Orchestra. Germaine Teugels (Songs). **BRUSSELS (2)**, National Orchestra. Mlle. Schmeidler (Pfte.) (Schubert, Mozart, Weber and Schumann). 8.45—Sketch. **BUCHAREST** and **RADIO-ROMANIA**, 8.5—Choir. 8.40—News. 8.55—Orchestra, Songs. **BUDAPEST (1)**, Orchestra (contd.). 8.40—News.
COLOGNE, Scene from Schiller's Life (Ernst); Orchestra, etc. (contd.).
EIFFEL TOWER, 8.30—Liszt Anniversary. Ina Marika (Pfte.). Lucienne Astruc (Songs).
FRANKFURT, Orchestra, etc. (contd.).
HAMBURG, **DEUTSCHLANDSENDER**, Concert (contd.). **HILVERSUM** (1,875 m.), Religious Programme. Songs. Pfte. Recitations. **HILVERSUM** (301.5 m.), Music (contd.). 8.40—Play.
KALUNDBORG, 8.5—Violin Sonata in D minor (Brahms). 8.30—Report. 8.50—"Knud Rasmussen"-Cantata (Sandberg-Nielsen). **KÖNIGSBERG**, Marches (contd.).
LEIPZIG, **BERLIN**, Orchestra, etc. (contd.).
MONTE CENERI, Talk. 8.15—Beethoven Concert. **MUNICH**, Orchestra, etc. (contd.).
OSLO, Sequence (contd.). 8.40—News.
PARIS (PTT), Lydia Chaliapin-Jean Rieux Programme. 8.15—Sports. 8.30—Concert and Opera. Part I. Orchestra, Harp, etc. Conductor: Rosenthal. Part II. "Les malheurs d'Orphée"—Opera (Milhaud). **POSTE PARISIEN**, 8.5—Paul Reboux. 8.20—Light Music. 8.35—Mlle. Bordas. **PRAGUE**, Requiem (contd.).
RADIO-NORMANDIE, Concert. 8.30—Sports. 8.45—Operetta Music. **RADIO-PARIS**, Maréchal ('Cello). 8.30—News. 8.45—"The Passing of the Third Floor Back"—Play (Jerome K. Jerome). **ROME**, Opera (contd.).
SOTTENS, "Faust" (contd.). **STOCKHOLM**, Saxophone and Pfte. 8.45—News. **STRASBOURG**, Sports. 8.20—Press Review (German). 8.30—See Paris (PTT). **STUTTGART**, Opera (contd.).
TOULOUSE, News. 8.10—Music. 8.55—News. **TURIN**, Play (contd.). 8.10—News (German). 8.20—Popular Concert (Wolf-Ferrari, Weprik, Ravel, Wagner).
VIENNA, Play (contd.). 8.20—Meditation.
WARSAW, Records. 8.30—Literature. 8.45—Italian Pfte. Music.

9 p.m.

ATHLONE, "The Singer" (contd.). 9.30—Variety.
BEROMÜNSTER, 9.5—News. 9.30—Dialect Programme. **BRUSSELS (1)**—"In Memoriam"—Address and Cathedral Chimes. 9.15—National Orchestra. Renaudin Speaking Choir. **BRUSSELS (2)**, Sketch. 9.15—Radio Orchestra. Béthune (Violin). **BUCHAREST** and **RADIO-ROMANIA**, Music (contd.).
DEUTSCHLANDSENDER, News. 9.30—String Trio in G minor (Berger). 9.45—Weather.
EIFFEL TOWER, Liszt (contd.).
HILVERSUM (1,875 m.), Records and Recitations. 9.40—Cantata (Handel). **HILVERSUM** (301.5 m.), 9.5—Joe Petersen (Treble). Palla (Pfte.). 9.35—Topical. 9.50—Renova Quintet.
KALUNDBORG, 9.5—News. 9.15—Danish Music. **KÖNIGSBERG**, News. 9.20—Football. 9.35—Serenade by the Börschel Band.
MONTE CENERI, Sports. **MUNICH**, and **MOST GERMAN STATIONS**, News. 9.30—Serenade. Orchestra and Pftes.
OSLO, Talk. 9.15—Sports. 9.30—Dance Records.
PARIS (PTT) and **STRASBOURG**, Opera (contd.). **POSTE PARISIEN**, Amateurs. 9.30—Sketch. 9.55—Dance Band. **PRAGUE**, News (Czech, German). 9.30—Records.
RADIO-NORMANDIE, Operetta Music. **RADIO-PARIS**, Play (contd.). **ROME**, Opera (contd.).
SOTTENS, "Faust" (contd.). 9.45—Talk. **STOCKHOLM**, Topical. 9.10—Act IV, "Il Trovatore"—Opera (Verdi).
TOULOUSE, News. 9.10—Light Music. 9.55—News. **TURIN**, Concert (contd.). 9.30—Announcements. 9.40—Dance Music.
VIENNA, Meditation. 9.10—News. 9.30—Louise Helletsgruber (Songs).
WARSAW, Pfte. (contd.). 9.15—Popular Concert. Orchestra and Oboe (Vivaldi, Bach, Schubert, Karlowicz, Mlynarski).

10 p.m.

ATHLONE, Variety. 10.30—Notes. 10.50—Samhain Ceilidhe.
BRUSSELS (1), News. 10.10—Records: Requiem (Fauré). 10.55—Christus vincit (Liszt). **BRUSSELS (2)**, News. 10.10—Records. (Schubert, Mozart, Wagner).
DEUTSCHLANDSENDER, Variety and Dance Music.
HILVERSUM (1,875 m.), Cantata (contd.). 10.10—News; Records; Epilogue. 10.40—Esperanto. **HILVERSUM** (301.5 m.), Quintet (contd.). 10.40—News. 10.50—Dance Band.
KALUNDBORG, Dance Band. **KÖNIGSBERG**, Serenade (contd.).
MUNICH and **MOST GERMAN STATIONS**, Serenade (contd.).
OSLO, Dance Records.
PARIS (PTT), Opera (contd.). 10.30—News. **POSTE PARISIEN**, Dance Band. 10.30—Records. **PRAGUE**, Records.
RADIO-NORMANDIE, Records, Light Music. **RADIO-PARIS**, Play (contd.). 10.45—French Music by the Krettly Orchestra. **ROME**, Opera (contd.). 10.30—Dance Music.
SOTTENS, Talk. **STRASBOURG**, See Paris (PTT). 10.30—News.
TOULOUSE, Music. 10.55—News. **TURIN**, News. 10.15—Dance Music.
VIENNA, Songs (contd.). 10.10—Records.
WARSAW, Concert (contd.).

11 p.m.

ATHLONE, Samhain Ceilidhe.
BERLIN, Dance Band. **BRUSSELS (1)** and (2), Records. **BUDAPEST (1)**, 11.5—News.
DEUTSCHLANDSENDER, Variety and Dance Music.
HILVERSUM (1,875 m.), Esperanto. **HILVERSUM** (301.5 m.), Dance Band. 11.10—Records.
KALUNDBORG, Dance Band.
POSTE PARISIEN, Light Music.
RADIO-NORMANDIE, Records and Light Music. **RADIO-PARIS**, Music (contd.).
STRASBOURG, News (German). **STUTTGART** and **FRANKFURT**, Serenade—Schubert and Bruckner Records.
TOULOUSE, Light Music. 11.55—News.

12 midnight

HILVERSUM (301.5 m.), Records.
RADIO-NORMANDIE, Orchestra. 12.30—Classical Music. **RADIO-PARIS**, Music (contd.).
STUTTGART and **FRANKFURT**, Serenade (contd.).
TOULOUSE, 12.5—Light Music.

SUNDAY (November 1)

NATIONAL

Time Signals: Big Ben, 12.30, 10.45 p.m. Greenwich, 10.30 a.m., 4.0, 9.0 p.m. D=Droitwich.

9.25-10.15 a.m. (D)—Service.
10.30-10.45 (D)—Weather Forecast.
12.30 p.m. (D)—BBC Variety Orchestra; Reginald Knights (Tenor), Cyril Knights (Baritone).
1.30 (D)—Fred Hartley and his Novelty Quintet.
2.0 (D)—Talk on Gardening.
2.20 (D)—BBC Military Band.
3.0 (D)—Gramophone Records.
3.40 (D)—"What is the Church for?" Interview with the Rev. S. M. Berry, D.D.—Howard Marshall.
4.0—Sir Walford Davies and the BBC Singers. Simple Church Music.
4.30—"Music of the Hours," by Walter Pitchford.
4.45—George Ackroyd (Flute).
5.0—Talk by The Rev. Canon L. W. Grensted, D.D.
5.20—BBC Orchestra, conducted by Edward Clark.
6.15—"Vexed Questions."
6.30—Schubert—1.; May Blyth (Soprano). Songs: Der Mondabend, Am Flusse, Der Liebende, Sängers Morgenlied, Die Sterne, Vergebliche Liebe, Naturgenuss, Das Sehnen, Die Liebe, Der Sänger.
7.0-7.50—"Coronel and the Falklands."
7.55—Service.
8.45—Appeal on behalf of the Medical Work of the Church in Central Tanganyika by the Rt. Rev. the Lord Bishop of Central Tanganyika.
8.50—News.
9.5—The London Palladium Orchestra.
10.10—Reading, Lord Dunsany.
10.30—Epilogue.

REGIONAL

Time Signals: Big Ben, 12.30, 10.45 p.m. Greenwich, 4.0, 9.0 p.m.

12.30 p.m. (ex. Midland)—D.
2.0 (Scottish)—Talk.
2.20 (Scottish)—Droitwich.
4.0 (Regional, Western, N. Ireland)—Mantovani and his Tipica Orchestra.
4.0 (Midland)—Jean Salder and his Serenaders.
4.0 (Northern)—Band.
4.0 (Scottish)—Erik Chisholm (Pfte.).
4.15 (Scottish)—Talk.
4.30—For the Children.
5.0—Kate Winter (Soprano).
5.15—Bach, Handel Concert from Paris. Conductor: Pierre Monteux. Marcel Dupré (Organ). Choral for Organ, In thee is joy, O God (Bach); Concerto No. 10 (Handel).
5.40—Talk.
6.0 (ex. Western, N. Ireland)—The Abram Colliery Band; Harold Bradbury (Tenor).
6.0 (Western)—Part 2 of "Westward Ho!"
6.0 (N. Ireland)—Harry Dyson (Flute), Walter Worsley (Horn), Edward Selwyn (Oboe).
6.30-7.45 (N. Ireland)—Service.
7.0 (ex. Midland, N. Ireland)—BBC Northern Orchestra: Johann Strauss, Coleridge-Taylor, Ponchielli, Liszt.
7.0 (Midland)—Berenska Orchestra.
7.55—Services.
8.45—Appeals: (Regional) East End Hostels Association. (Midland) Nottingham General Hospital. (Western) Bristol Maternity Hospital. (Northern) Bradford Charity Organisation Society. (N. Ireland) Lord Mayor's Coal Fund. (Scottish) Royal Alexandra Infirmary, Paisley.
8.50—News.
9.5—Egon Petri (Pfte.). Liszt Commemoration Concert. BBC Women's Chorus and Orchestra, conducted by Sir Henry J. Wood.
10.30—Epilogue.

Hours of Transmission in Greenwich Mean Time.

MOSCOW and REYKJAVIK Programmes did not arrive in time for inclusion in this week's issue.

ATHLONE (Ireland)
565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).
2.0-4.0 p.m.—Records. 8.15—"The Singer"—First Production, from the Gate Theatre, Dublin, presented under the auspices of the Irish National Music League. The Ceol Cumann School of Ballet Gaelic Dance Drama. 9.30—Variety. 10.30—Weather; What happened to-day. 10.40—Sports Talk by Sean O'Ceallachain. 10.50—Samhain Ceilidhe. 11.30—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)
392 kc/s (765 m.); 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)
841 kc/s (356.7 m.); 100 kW.
5.0 a.m.—Call; Gym. 5.30—Concert from Hamburg. 7.0—Gym. 7.25—Talk. 7.55—Chimes and Service from Potsdam Garrison Church. 8.55—Cathedral Chimes. 9.0—Weather.
9.30-10.30—Dahlke Trio. Trio in E flat (Kreutzer). Pfte. Pieces (Mozart). Trio in B flat (Beethoven).
11.0—Light Music—Military Band. Nettelmann Band. Romanoff Balalaika Quintet.
1.0 p.m.—Records. Part I: Richard Strauss Music. Olympic Hymn by the Bruno Kittel Choir, Burlesque by Elly Ney (Pfte.) and Orchestra. Part II: Bayreuth Festival Concert of 1936. Conductor: Tietjen. Selection, "Lohengrin" and "The Valkyrie" (Wagner). 2.0—From the Kurmark. 2.30—Kurmark Theatre Performances, with Records.
3.0—See Stuttgart.
5.0—Composers in a Programme of their own Music—Charlotte Baerenz, Peter Igelhoff, Willi Kollo, Günther Neumann, Werner Oehlschläger and Peter Voelkner.
5.50—Quintet in C (Pfitzner) by Heinrich Steiner (Pfte.) and the Steiner Quartet. 6.40—Sports.
7.0—See Leipzig. 9.0—News.
9.30—See Munich.
11.0-12.0 m't—Stanke Band.

BEROMÜNSTER (Switzerland)
556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).
9.0 a.m.—Protestant Service. 9.50—Chamber Music. 10.30—Dorette Hanhart reads. 11.0—Zürich Radio Orchestra, Conductor: Hofmann. 11.30—News. 11.40—To be announced.
12.30 p.m.—Haustein Music by Ida Furrer (Zither). 1.10-1.30—Talk: The Earth and its Properties.
4.0—"Helvetia" Choral Society from the Tonhalle, Zürich. Conductor: Carl Kleiner. 5.30—Käthe Kruse. 6.0—Religious Address. 6.30—News. 6.45—Zürich Radio Orchestra, Conductor: Bernhard. 7.15—"Brugge boue"—Play (Felix).
8.15—Talk with Music: Liszt's Stay in Switzerland. 9.5—News.
9.30-10.0 (from Basle)—Dialect Programme with the Born Brothers (Country Music) and Emmy Braun (Yodels).

BRATISLAVA (Czechoslovakia)
1,004 kc/s (298.8 m.); 13.5 kW.
Transmits at intervals from 5.45 a.m.
5.0 p.m.—Hungarian Transmission: Talk, followed by Cantata (Bach). 5.45—Record. 5.50—See Prague.
6.5—"Death in Slovak Folk Songs"—Janka Gabco-Kamasová. 6.20—"Herod"—Poem (Vajanský). 7.0-9.20—See Prague. 9.20—News (Hungarian).
9.30-10.30—See Prague.

BRESLAU (Germany)
950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).
4.0 a.m. (from Gleiwitz)—Folk Music.
5.0—See Hamburg. 7.0—Reading.
7.10-7.40 (from Gleiwitz)—Folk Music.
7.50—News.
8.0—See Hamburg. 8.45—Reading.
9.15—Modern Chamber Music. Sonata in D minor for Violin and Pfte. (Dannehl). Concertino (Protze). 9.55—"Faith"—Sequence (Recorded). 10.25—Records: Popular Music. 10.40—An Interview with a Railway Porter.
11.0—See Berlin. 1.0 p.m.—News. 1.10—For Women. 1.30—Call of Youth. 1.45—Greetings. 1.50—Variety. 2.30—"The Pied Piper of Hamelin"—Play for Children (Friedrich).
3.0—See Stuttgart.
5.0—Talk: Fridtjof Nansen.
5.20 (from Gleiwitz)—Werner Ottka (Pfte.). Sonata (Marcello). Rondo a capriccio (Beethoven). Prelude in D flat (Chopin). Nocturne in A flat (Chopin). 5.50—Sports.
6.15—Hungarian Folk Songs (arr. Sczuka). Choir, Members of the Station Orchestra. Hanna Ehrhardt and Walter Gembs (Speakers) and Others. 7.0—Talk: Rübezahl, the Mountain Sprite.
7.20—"Rübezahl"—Play (Kaergel), Music by Sczuka. 9.0—News.
9.30-11.0—See Munich.

BRNO (Czechoslovakia)
922 kc/s (325.4 m.); 32 kW.
Transmits at intervals from 5.45 a.m.
6.20 p.m.—"Moravian Country Bells"—Sequence of Laments and Ballads.
7.0-10.30—See Prague.

BRUSSELS (No. 1) (Belgium)
620 kc/s (483.9 m.); 15 kW.
6.37-9.0 a.m.—Records; Gym; News. 9.0—Records. 9.45—Hints for Gardeners and Farmers.
10.0—Pontifical High Mass from St. Paul's Cathedral, Liége. Missa Iste Confessor (Palestrina) by the Cathedral Choir. Conductor: Canon Breuer.
11.30—Records.
12.0 noon—Records: Popular Music.
12.30 p.m.—Salon Orchestra. Conductor: Féron.
1.0 p.m.—News.
1.10—Radio Orchestra. Conductor: Gason. Procession flamande (Leemans). Serenade (Hüe). Andante religioso (Thomé). Nocturne (Pierné). Meditation (Glazunov).
1.30—Records: Symphony in D (Haydn). 2.0-2.15—Art Notes; Ballet égyptien (Luigini) by Schnyders Orchestra.
2.30—Light Music—Schnyders Orchestra.
3.0—Records: "The Dusk of the Gods" (Wagner).
4.0—Chamber Music by the Maurice Blondel Quartet. Quartet in G (Mozart). Quartet (Roesgen-Champion). Quartet (Lalo). 5.0—Football Match Report.
5.10—Joseph Delporte (Organ). Choral (Bach). Lamento (Barié). Andante and Scherzo from the Grande Pièce Symphonique (César Franck). Finale, Second Symphony (Widor).
5.30—"L'envers du ciel"—Play for Children (Desmet). 6.5—Talk and Recitations: "Sagesse" (Verlaine).
6.15—Records: Negro Spirituals. Steal away to Jesus. Sometimes I feel like a Motherless Child. Heav'n, Heav'n (Burleigh). Negro Spirituals (White).
6.30—Adrienne Dulait (Pfte.). Sonata in C (Scarlatti). Prelude, Aria and Finale (Franck). Etude (Debussy).
6.45—Records. 7.0—Roman Catholic

PRINCIPAL EVENTS

SERVICES AND SACRED MUSIC
A.M.
9.0 Kalundborg: Service.
10.0 Brussels 1: Pontifical Mass.
10.0 Radio-Paris: From Rouen Cathedral.
P.M.
4.0 Stockholm: Evensong.
9.0 Brussels 1: "In Memoriam."
9.40 Hilversum (1,875 m.): Cantata (Handel).

SYMPHONY CONCERTS
2.10 Hilversum (1,875 m.): van Otterloo, Wagner (pfte.).
4.0 Warsaw: Classics.
5.0 Budapest 1: Requiem (Verdi).
5.0 Sottens: Mendelssohn.
7.0 Monte Ceneri: Requiem (Perosi).
7.5 Prague: Requiem (Verdi).
7.30 Budapest 1: Gluck, Strauss, Liszt.
7.55 Hilversum (301.5 m.): van Raalte, Spalding (violin).
8.15 Monte Ceneri: Beethoven.
9.5 Regional: Liszt.
11.0 Stuttgart, Frankfurt: Schubert, Bruckner.

LIGHT CONCERTS
1.0 Radio-Paris: Orch., songs.
2.25 Kalundborg: Popular orch.
3.0 Radio-Paris: Porée Orch.
5.0 Stockholm: Scandinavian.
7.0 Frankfurt: Orch., song, oboe.
7.0 Hamburg, Deutschlandsender: Mozart, etc.
7.0 Munich: Conductor, Winter.
8.20 Turin: Conductor, Ferrero.
8.45 Radio-Normandie: Operetta music.
8.55 Bucharest: Orchestra, songs.
9.15 Kalundborg: Danish music.
9.15 Warsaw: Classics.
9.30 Munich, etc.: Serenade.
10.45 Radio-Paris: French music.

OPERAS
6.40 Stuttgart: "Don Giovanni."
7.20 Sottens: "Faust" (Gounod).
7.45 Rome: "Conchita" (Zandonai).
9.0 (app.) Paris (PTT), Strasbourg: "Les malheurs d'Orphée" (Milhaud).
9.10 Stockholm: "Il Trovatore," Act 4.

CHAMBER MUSIC
4.0 Brussels 1: String quartets.
8.5 Kalundborg: Violin, pfte. (Brahms).
9.30 Berlin: Trios.

RECITALS
6.30 National: Schubert songs.
7.0 Brussels 2: English songs.
8.0 Radio-Paris: Maréchal (cello).
8.30 Eiffel Tower: Pfte., song (Liszt).
9.30 Vienna: Songs, arias.

PLAYS
5.30 Paris (PTT): "Le miracle de l'enfant Bavard" (Ghéon).
6.30 Stockholm: "London Wall."
7.10 Vienna: "Gevatter Tod."
8.15 Athlone: "The Singer."
8.45 Radio-Paris: "The Passing of the Third Floor Back."

LAST NEWS BULLETINS, see Monday

DANCE MUSIC
9.30 Oslo; 9.40, Turin; 9.55, Poste Parisien; 10.0, Deutschlandsender, Kalundborg; 10.50, Hilversum (301.5 m.); 11.0, Berlin.

Notes. 7.15—To be announced. 7.30—News.
8.0—Radio Orchestra. Conductor: Gason. Germaine Teugels (Songs). Prelude (Bach-André). Song: Ave Maria (Schubert). Abendlied (Schumann). 'Cello and Orchestra: Elégie (Fauré). Song: Tu Virginum (Mozart). Largo (Handel). Romance in F for Violin and Orchestra (Beethoven). Song (Bach). Prelude and Allegro (Pugnani-Kreisler).
9.0—"In Memoriam"—Address by the Rev. Fr. Loslever. Chimes from the Bruges, Malines, Namur, Liége, and Tournai Cathedrals.
9.15—National Orchestra. Conductor: Jongen. Renaudin Speaking Choir. Conductor: Madeleine Renaud-Thévenet. Adagio (Lekeu). Speaking Choir: Heureux ceux qui sont morts (Péguy). Concerto grosso (Corelli). Rédemption (Franck).
10.0—News. 10.10—Records: Requiem (Fauré). 10.55—Christus vincit (Liszt).
11.0-12.0 m't—Records.

BRUSSELS (No. 2) (Belgium)
932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.
6.37-9.5 a.m.—Records; Gym; News. 9.5—Records: Classical Music. 9.55—Music Review. 10.0—Records.
10.45—Rina Claudy (Songs).
11.15—Light Orchestral.
12.0 noon—Paula De Backer (Songs) and Cecilia Van Dycke (Pfte.). Songs: (a) Kom hier op mijn vinger (Jules Van Dycke), (b) Four Songs (Cecilia Van Dycke). Cecilia Van Dycke plays her own Music: Prelude and Elégie. Songs: (a) Two Canzonettas (De Fesch), (b) Witte, watte wolken (Mortelmans), (c) Zang der herten (Mortelmans), (d) Mei, (e) Zing niet te zoet, and (f) Lentelied (D'Hayer).
12.31 p.m.—Radio Orchestra. Conductor: Gason. Suite pastorale (Chabrier). Excerpts, Les heures dolentes (Dupont).
1.0—News.
1.10—Salon Orchestra. Conductor: Féron.
1.30-2.0—Paul De Maleingreau (Organ). Part I: Du Mage Music. Plein-jeu. Basse de trompette. Récit. Grand jeu. Part II: Jacques de Chambonnières Music. Le moutier. Double du moutier. Part III: Offertoire sur les grands jeux (Nicolas de Grigny). Part IV: Four Paraphrases (de Maleingreau).
2.15—Brenders Jazz Band. 3.0—Topical.
3.15—Light Music—Schnyders Orchestra.
4.0—Records: "Iolanthe" (Sullivan).
5.0—Brenders Dance Band; at 5.30—Sports.
6.0—Salon Orchestra. Conductor: Féron. Jacqueline De Kesel (Songs). Hungarian Fantasy. Zsigetvar Ostroma (Zsadanyi-Féron). Spanish Serenade, Salamanca (Grit). Intermezzo, Arabesca (Jacopelli). Songs: Tango, El mandocino (Toranzo). Giaour (Smetsky). Waltz, Suis ton chemin (Verdun). Chanson de mai (Dandois).
6.45—Religious Address.
7.0—Norah Scott Turner (Songs). O solitude (Purcell). My lovely Celia (Munro-Lane Wilson). Ungeduld (Schubert). Geheimes (Schubert). Waldeinsamkeit (Reger). Il pleure dans mon coeur (Delius). Autumn Song (Delius). April (Quilter). Armida's Garden (Parry). I love the jocund Dance (Walford Davies).
7.30—Film Review.
8.0—National Orchestra. Conductor: Jongen. Mlle. Schmeidler (Pfte.). Overture, "Fierrabras" (Schubert). Six German Dances (Mozart). Pfte. and Orchestra; Concert Piece (Weber). Overture, "Julius Caesar" (Schumann).
8.45—"Doodendag"—Sketch (De Praetere).
9.15—Radio Orchestra. Conductor: Gason. Béthume (Violin). Suite in D (Bach). Violin Solo, "Le déluge" (Saint-Saëns). Interlude dans un mode antique (Glazunov). Minuet' "Orpheus" (Gluck). Pavane pour une Infante défunte (Ravel).
10.0—News.
10.10-12.0 m't—Records: Quintet in A (Schubert). Violin Concerto in G (Mozart) by Bronislaw Hubermann. Selection, "Parsifal" (Wagner).

BUCHAREST (Romania)
823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov), 160 kc/s (1,875 m.).
5.30-6.30 a.m.—To be announced. 9.30—Chimes; Address. 9.50—Records: Sacred Music. 9.55—Church Notes. 10.10—Sacred Songs. 10.40—Time; News; Sports. 10.50—Dinicu Orchestra; at 12.10 p.m.: News. 1.0—For Peasants. 2.0-2.45—Popular Romanian Music by the Baditza Orchestra. 5.0—Time; Weather; Topical. 5.15—Dance Music; at 6.0: Educational Programme. 7.0—"Viforul" (Hurricane)—Historical Play (Delavrancea). 8.5—"Cântul nostru" Choir. Conductor: Niculescu. 8.30—News; Sports.
8.55—Radio Orchestra. Conductor: Rogalski. Mircea Lazar (Songs). 9.55—News.

BUDAPEST (No. 1) (Hungary)
546 kc/s (549.5 m.); 120 kW.
8.30 a.m.—News. 9.0—Greek Orthodox Service. 11.30—Academy of Music Teachers' Chamber Ensemble. 12.30 p.m.—Radio Review. 12.45—Records. 1.45—Hygiene Talk. 2.0—For Farmers. 2.50—'Cello. 3.30—Talk. 4.0—Radio Orchestra. Conductor: Bertha.
5.0—Requiem (Verdi) from the Royal Opera. 7.10—Talk.
7.30—Opera Orchestra. Conductor: Fridl. Excerpt, "Iphigenia in Aulis" (Gluck). Death and Transfiguration (Strauss). Tasso (Liszt).
8.40-9.0—News. 9.0-11.5—No Transmission (All Saints' Day). 11.5—News.

BUDAPEST (No. 2) (Hungary)
359.5 kc/s (834.5 m.); 18 kW.
11.30 a.m.—Records. 2.0 p.m.—University Choir. 3.35—Station Orchestra; at 4.0, Talk.

COLOGNE (Germany)
658 kc/s (455.9 m.); 100 kW.
5.0 a.m.—See Hamburg. 7.0—Weather; Water Level. 7.5—Reading. 7.15—Maria Mattheus (Contralto) and the Station Instrumental Trio. 8.15-8.45—Service from the Carthusian Church. 9.0—Records: Classical Music. 10.15—Poems. 10.30—See Hamburg. 11.10—Music from Berlin; at 12.0 noon-12.15 p.m., Announcements; Greetings.
1.0—Light Music by the Chamber Quintet. 1.30—Hints for Everyone; The Week's Calendar.
2.10 (from Düsseldorf)—"Autumn in Old German Songs." Düsseldorf Madrigal Society, Conductor: Neyses.
2.45—German for Germans.
3.0—Variety. Station Orchestra, Conductor: Eysoldt. Station Choir, Conductor: Breuer.
5.0—Where are you, Comrade?—Programme for Ex-Servicemen. 5.30—"November"—Radio Calendar (Kohlhaas). 6.25—Report: The Silver Shield Hockey Match, from Dortmund. 6.35—Report: The Opening of the Skating Rink from the Westphalian Hall, Dortmund. 6.50—Sports.
7.0—Station Orchestra, Conductor: Chemin-Petit. Willi Hülser (Pfte.). Sauerteig (Flute). Grote ('Cello). Pfte. Sonata (Gabrieli-Stein). Pfte. Concerto in D minor (Bach). Suite in B minor (Bach). Overture in G minor (Bruckner). Mysterien (Juon). 'Cello: Introduction and Passacaglia (Chemin-Petit). In the interval at 8.0 (approx.): "Das Ende des Lebens"—Scene from Schiller's Life (Ernst) by Oettershagen and Henn.
9.0—Time; News.
9.30-11.0—See Munich.

Hans A. Winter, conductor of Munich's concert at 7 p.m.

DEUTSCHLANDSENDER (Germany)
191 kc/s (1,571 m.); 60 kW.
5.0 a.m.—See Hamburg. 7.0—For Peasants. 8.0—Accordions, Bassoon, Occarina and Pfte. 9.0—Hitler Youth Music Festival (Recorded). (For details see 8.0 a.m., Hamburg.) 9.45—Richard Neumann (Wurlitzer Organ). 10.0—Albert Sergel reads his own Poems. 10.15—Weather. 10.30—Variety from the Wilhelmshalle, Berlin. Lutter and Profé Bands and Variety Artists. 12.0 noon—Greetings.
12.10 p.m.—See Frankfurt. 1.0—"Krähenabenteuer"—Play for Children (Gertraude Knab) (Recorded). 1.30—Brazilian and Japanese Folk Songs (Recorded). 1.50—Talk: Genealogy. 2.0—"Come to the Dance"—Variety. 3.0—Records. 4.30—"Mont Royal"—Sequence from Werner Beumelburg's Book (arr. Meckel). 5.0—Station Orchestra, Conductor: Bruck.
6.0—"Walter Kollo"—Musical Sequence from the Deutschlandhalle, Berlin. 6.40—Sports.
7.0—See Hamburg. 9.0—News. 9.30—String Trio in G minor (Berger) by Grete Eweler (Violin), Irmgard Veidt (Viola) and Helma Bemmer ('Cello). 9.45—Weather.
10.0-11.55—Variety and Dance Music with Egon Kaiser from the Deutschlandhalle, Berlin.

FRANKFURT (Germany)
1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg and Trier, 1,195 kc/s (251 m.).

SUNDAY (November 1)

5.0 a.m.—See Hamburg. 7.0—Water Level; Weather. 7.5-7.25—Gym. 7.45—Ria Jost (Organ Chorals). 8.0—Protestant Service. 8.45—Reading. 9.0—Hitler Youth Programme. 9.30—Reading (Kneip). 9.45—Labour Service Festival from the Gloria Cinema, Giessen.
10.30—See Hamburg. 11.10—Light Music. Hauck Band and Artists.
1.0 p.m.—See Stuttgart. 1.45—Stories of the People. 2.0—For Country People.
3.0—Orchestra from Wiesbaden. Conductor: Schalck.
5.0—Songs and Music by Hitler Youth (Recorded). 5.30—Records: Classical Music. 6.0—"Home Sickness"—Sequence (Dauthendey). Music by Wild. 6.50—Sports.
7.0—Station Orchestra, Conductor: Rosbaud. Gertrud Rünger (Songs). Hermann Töttcher (Oboe). Part I. Handel Music. Water Music. Aria, "Julius Caesar." Oboe Concerto. Recitative and Aria, "Julius Caesar." Part II. Overture, "Die Zwillingsbrüder" (Schubert). Scene and Aria, "Oberon" (Weber). March, "Le Cid" (Cornelius). Part III. Italian Music. Overture, "Luise Miller" (Verdi.) Aria, "Don Carlos" (Verdi) Serenade (Stradella-Malipiero). Canzoni amorose (Bassani-Malipiero). Part IV. Wagner Music. The Ride of the Valkyries. Aria, "The Dusk of the Gods." Prelude and Death of Isolda, "Tristan and Isolda." 9.0—Time; News. 9.15—Sports.
9.30—See Munich.
11.0-1.0 a.m. (Monday)—See Stuttgart.

HAMBURG (Germany)
904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg and Stettin, 1,330 kc/s (225.6 m.).
5.0 a.m.—Harbour Concert. 7.0—News. 7.10—Cycle Race. Report from the Hanseatic Hall. 7.20—Gym. 7.35—Art Notes. 8.0—Hitler Youth Music Festival from the Burg Dankwarderode, Brunswick. Prof. Diener and his Collegium musicum; Talk by Herr Rosenberg. 8.45—"It happened in November. . . ."
9.0-9.15—"November"—Cantata (Sidow). 9.30-10.0—Meditation.
10.30—Hitler Youth Music Festival from the Landestheater, Brunswick. Orchestra, Conductors: Abendroth and Gerhard Maasz. Feierliche Musik (Maasz). Partita (Spitta).
11.10—Music from Berlin; at 11.55: Weather. 1.0 p.m.—"Jörn ward lieker Köni!"—Dialect Play for Children (Hecker), Music by Tenne. 2.0—Brazilian and Japanese Folk Songs (Recorded). 2.20—Schubert Recital by the Blind Pianists Ernst Blandow and Karl Niemann. Fantasia in F minor. Two Marches.
2.45—Commentary on the Second Half of the Rugby Match, Germany v. France.
3.25—Concert from Saarbrücken.
5.0—"Gutenberg"—Play (Walter), with Music by the Station Male Voice Choir, Conductor: Gregor. 5.45—Station Dance Band, Conductor: Gebhardt. 6.35—Sports; Weather.
7.0—Second "People's" Concert from the Musikhalle. Station Orchestra, Conductor: Thierfelder. Robert Casadesus (Pfte.). Bernhard Jakschtat (Baritone). Part I. Mozart Music. Suite of Unfamiliar Pieces (arr. Gohlez). Aria, "Don Giovanni." Pfte. Concerto in D. Part II. Don Juan (R. Strauss). Pfte. Concerto in A (Liszt). Song: Die drei Zigeuner (Liszt). Overture, Carneval romain (Berlioz).
9.0—News.
9.30-11.0—See Munich.

From World Sketch Map by Edward Stanford, Ltd., 12-14, Long Acre, London, W.C.2. Based on the TIME-ZONE CHART OF THE WORLD published by the Admiralty under the direction of the Hydrographer to the Royal Navy.

Ref.	Station	Call	m.	kW
1	Bandoeng (Java)	PMA	15.50	—
1	Bandoeng (Java)	PMN	29.24	3
1	Bandoeng (Java)	PLE	15.93	60
1	Bandoeng (Java)	PLP	27.25	3
2	Barranquilla (Colombia, S. America)	HJ1ABB	46.52	1
2	Barranquilla (Colombia, S. America)	HJ1ABG	49.65	0.15
3	Belgrade (Yugoslavia)	..	49.18	1
4	Bogotá (Colombia, S. America)	HJ3ABH	49.85	1.6
5	Bombay (India)	VUB	31.36	4.5
6	Boston (Mass.)	W1XAL	49.67	10
			25.45	10
7	Bound Brook (New Jersey, U.S.A.)	W3XAL	49.18	35
			16.87	35
8	Bowmanville (Canada)	CRCX	49.26	0.5
9	Budapest (Hungary)	HAS3	19.52	20
9	Budapest (Hungary)	HAT4	32.88	5
73	Buenos Aires (Argentine)	LRU	19.62	5

Ref.	Station	Call	m.	kW
73	Buenos Aires (Argentine)	LRX	31.32	5
10	Calcutta (India)	VUC	49.1	0.5
11	Calgary (Alberta)	VE9CA	49.75	0.1
12	Cali (Colombia)	HJ5ABD	49.3	0.1
13	Caracas (Venezuela)	YV2RC	51.72	1
13	Caracas (Venezuela)	YV3RC	48.78	—
13	Caracas (Venezuela)	YV4RC	47.05	0.5
14	Chicago (Ill. U.S.A.)	W9XAA	49.33	0.5
14	Chicago (Ill. U.S.A.)	W9XF	49.18	10
15	Cincinnati (U.S.A.)	W8XAL	49.5	10
16	Colombo (Ceylon)	..	49.6	0.5
17	Daventry	GSA	49.59	15
17	Daventry	GSB	31.55	15
17	Daventry	GSC	31.32	15
17	Daventry	GSD	25.53	15
17	Daventry	GSE	25.29	15
17	Daventry	GSF	19.82	10
17	Daventry	GSG	16.86	10
17	Daventry	GSH	13.97	10
17	Daventry	GSI	19.66	10
17	Daventry	GSJ	13.93	10

Ref.	Station	Call	m.	kW
17	Daventry	GSL	49.1	15
17	Daventry	GSN	25.38	10
17	Daventry	GSO	19.76	10
17	Daventry	GSP	19.69	15
23	Eindhoven (Holland)	PCJ	19.71	20
23	Eindhoven (Holland)	PCJ	31.28	20
18	Georgetown (British Guiana)	VP3MR	42.36	0.15
19	Guayaquil (Ecuador)	HC2RL	45	0.2
20	Halifax (Nova Scotia)	VE9HX	48.92	0.2
21	Havana (Cuba)	COCD	48.92	0.25
21	Havana (Cuba)	COCO	49.92	0.5
21	Havana (Cuba)	COCH	31.8	—
22	Hong Kong	ZCK3	34.29	0.5
23	Huizen (Holland)	PHI	25.57	23
23	Huizen (Holland)	PHI	16.88	23
24	Johannesburg (S.A.)	ZTJ	49.2	5
25	Jelöy (Norway)	LKJ1	31.48	1
26	Kharbarovsk (U.S.S.R.)	RV15	70.2	20
27	Lyndhurst (Australia)	VK3LR	31.32	1
28	Lisbon (Portugal)	CSL	48.78	0.5

"WORLD-RADIO" SHORT-WAVE AND TIME-ZONE MAP OF THE WORLD

With "key" showing reference numbers, names of stations, call-letters, wavelengths in metres (m), and aerial power (kW) in accordance with "World-Radio" Short-Wave List. To ascertain the time at any station shown, add to or subtract from G.M.T. the appropriate zone number, except where "half-hour" times are indicated on the map (e.g. India).

In China, Afghanistan, Persia, Arabia, Abyssinia, Borneo, Sumatra, Venezuela, Bolivia, Guatemala, Franklin, most of Greenland, and parts of New Guinea—either the legal time is not known, or no legal time is kept.

-1	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12

Ref.	Station	Call	m.	kW
28	Lisbon (Portugal)	CT1AA	31.07	2.5
			25.36	2
28	Lisbon (Portugal)	CT1CT	24.83	0.5
			31	0.5
29	Madrid (Spain)	EAQ	30.43	20
30	Manizales (Colombia)	HJ4ABB	49.15	0.3
30	Manizales (Colombia)	HJ4ABL	49.45	0.15
31	Maracaibo (Venezuela, S. America)	YV5RMO	51.28	—
32	Medellin (Colombia)	HJ4ABA	25.62	—
32	Medellin (Colombia)	HJ4ABE	50.6	0.05
33	Melbourne (Australia)	VK3ME	31.55	1.5
34	Mexico City	XEBT	50	1
35	Miami (Florida)	W4XB	49.67	2.5
36	Millis (U.S.A.)	W1XK	31.35	10
37	Montreal (Canada)	VE9DN	49.96	6
38	Moscow (U.S.S.R.)	RW59	50	20
38	Moscow (U.S.S.R)	RNE	25	20
39	Nairobi (Kenya)	VQ7LO	49.31	0.5
40	Panama City (Panama)	HP5B	49.75	0.1
41	Parêde (Portuguese Radio Club)	CT1GO	24.2	0.35
			48.4	5

Ref.	Station	Call	m.	kW
42	Penang (S.S.)	ZHJ	49.33	0.05
43	Pernambuco (Brazil)	PRA8	49.67	3
44	Philadelphia (Pa., U.S.A.)	W3XAU	49.5	10
			31.28	10
45	Pittsburgh (Pa., U.S.A.)	W8XK	48.86	40
			25.27	40
			19.72	40
			13.93	40
46	Poděbrady (Prague) (Czechoslovakia)	OLR	49.05	—
			25.51	—
			19.69	—
47	Ponta Delgada (Azores)	CT2AJ	75	0.05
48	Quito (Ecuador, S. America)	HCJB	36.5	0.25
49	Radio - Colonial (Paris, France)	TPA4	25.6	12
		TPA3	25.23	12
		TPA2	19.68	12
50	Radio Nations (Prangins, Switzerland)	HBP	38.48	20
50	Radio Nations	HBL	31.27	20
51	Reykjavik (Iceland)	TFJ	24.52	7.5

Ref.	Station	Call	m.	kW
52	Riobamba (Ecuador, S. America)	PRADO	45.31	—
53	Rio de Janeiro (Brazil)	PRF5	31.58	5
54	Rome (Italy)	2RO	25.4	25
			31.13	25
55	Ruysselede (Belgium)	ORK	29.04	9
56	San José (Costa Rica)	TIX	51.52	—
56	San José (Costa Rica)	TIPG	46.86	0.5
57	Schenectady (U.S.A.)	W2XAD	19.57	18
57	Schenectady (U.S.A.)	W2XAF	31.48	30
58	Singapore (S.S.)	ZHI	49.85	0.09
59	Skamlebaek (Denmark)	OXY	49.5	0.5
60	Sofia (Bulgaria)	LZA	20.04	7
61	Sourabaya (Java)	YDB	31.09	1
62	Suva (Fiji)	VPD2	31.45	—
63	Sydney (Australia)	VK2ME	31.28	20
64	Tokio (Japan)	JZI	31.48	20
64	Tokio (Japan)	JZK	19.8	20
64	Tokio (Japan)	JVN	28.01	20
65	Trujillo City (D.R.)	HIX	50.16	0.2
65	Trujillo City (D.R.)	HIZ	47.5	—

Ref.	Station	Call	m.	kW
66	Vatican City (Italy)	HVJ	50.26	10
			19.84	10
67	Valencia (Venezuela)	YV6RV	46	0.5
68	Vienna Experimental (Austria)	OER2	49.41	1.5
69	Warsaw (Poland)	SPW	22	10
70	Wayne (N.J.)	W2XE	49.02	1
			25.36	1
			19.65	1
			13.94	1
71	Winnipeg (Canada)	CJRX	25.6	2
71	Winnipeg (Canada)	CJRO	48.78	2
72	Zeesen (Germany)	DJA	31.38	5-50
72	Zeesen (Germany)	DJB	19.74	5-50
72	Zeesen (Germany)	DJC	49.83	5-50
72	Zeesen (Germany)	DJD	25.49	5-50
72	Zeesen (Germany)	DJE	16.89	5-50
72	Zeesen (Germany)	DJL	19.85	5-50
72	Zeesen (Germany)	DJN	31.45	5-50
72	Zeesen (Germany)	DJQ	19.63	5-50
72	Zeesen (Germany)	DJR	19.56	5-50

SUNDAY (November 1)

HILVERSUM (1.875 m.) (Holland)
160 kc/s; 10 kW until 2.40 p.m.; 100 kW from 2.40 p.m.
8.10-9.10 a.m.—K.R.O. Religious Programme.
9.10-11.55—N.C.R.V. Programme. 9.10—Sacred Music on Records. 9.30—Service.
11.55 a.m.-4.40 p.m.—K.R.O. Programme. 11.55—K.R.O. Orchestra. Conductor: van 't Woud; at 12.40: Talk. 1.40—Questions and Answers. 2.10—K.R.O. Symphony Orchestra. Conductor: van Otterloo. Josef Wagner (Pfte.). In the intervals: Records. 3.40—For Hospitals. 4.35—Sports.
4.40-7.25—N.C.R.V. Programme. 4.40—"Looft den Heer" Women's Choir. Conductor: Pul. v. Beelen (Organ). 5.10—Sacred Music on Records. 5.30—Service: Sacred Music.
7.25 till Close Down—K.R.O. Programme. 7.25—Sports; Religious Address; News.
8.0—Sacred Concert. José Candel (Songs), Boshart (Pfte.), Schaer (Recitations). 9.0—Records and Recitations.
9.40—Cantata (Handel). K.R.O. Choir and Orchestra. Conductor: Vermeulen. Sophie Haase-Pieneman (Soprano). Annie Hermes (Contralto), Cor van Munster (Tenor), Lammen (Bass). 10.10—News; Records; Epilogue. 10.40-11.10—Esperanto Talk.

HILVERSUM (301.5 m.) (Holland)
995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
8.35-11.40 a.m.—V.A.R.A. Programme. 8.35 a.m.—Records. 8.40—News; Talk. 9.15—Records; Talk. 10.10—V.A.R.A. Orchestra, Conductor: Tiggers; Talk.
11.40-4.40 p.m.—A.V.R.O. Programme. 11.40—Time. 11.41—Valentijn Schoonderbeek (Organ) from Naarden Church. 11.50—A.V.R.O. Orchestra, Conductor: Van Raalte. In the intervals: Elly van Stekelenburg (Krontjon Songs). 1.10 p.m.—Weekly Book Talk.
1.40—Commentary on the International Football Match, Holland *v.* Norway, from the Olympic Stadium, Amsterdam. 3.40—A.V.R.O. Dance Band, Conductor: Mossel. 4.25—News; Records.
4.40-5.40—V.A.R.A. Programme. 4.40—V.A.R.A. Orchestra, Conductor: Roekel. 5.35—News.
5.40-7.40—V.P.R.O. Programme. 5.40—Commemoration Programme. 6.10—Records. 6.25—Service.
7.40 till Close Down—A.V.R.O. Programme. 7.40—Time; News.
7.55—A.V.R.O. Orchestra, Conductor: Van Raalte. Albert Spalding (Violin). 8.40—Play. 9.5—Joe Petersen (Treble). Pierre Palla (Pfte.). 9.35—Topical. 9.50—Renova Quintet. 10.40—News.
10.50-11.10—A.V.R.O. Dance Band, Conductor: Mossel. 11.10-12.40 a.m. (Monday)—Records.

KALUNDBORG (Denmark)
240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).
7.0 a.m.—Gym. 7.45—French Topicalities. 8.0—German Talk. 8.15—English Lesson. 8.30-8.55—Talk: Evening Schools for Country Folk. 9.0—Service from Viborg Cathedral. 10.40—News. 11.0—Chimes.
11.2-1.0 p.m.—Radio Orchestra. Conductor: Hye-Knudsen. Marche lorraine (Ganne). España (Waldteufel). Overture, "Das Modell" (Suppé). Italian Royal March, San Lorenzo (Silva). Selection, "The Gipsy Princess" (Kálmán). March, Hoch Heidecksburg (Herzer). Ballet égyptien (Luigini). Come, Sing to me (Thompson). Norwegian Rhapsody (Svendsen). Valse des fleurs (Tchaikovsky) King Christian X March (Andersen). Military Gallop (Lumbye); at 11.50: Reading.
1.0—For Children. 1.30—Records. 2.0—Commentary on the Football Cup Final from the Sports Park.
2.25—Fourth People's Concert from the State Broadcasting Building. Radio Symphony Orchestra. Guest Conductor: Malko. Rena Madsen (Songs). Schiøler (Pfte.). Coronation March, "The Prophet" (Meyerbeer). Aria, "Robert of Normandy" (Meyerbeer). Suite, "Swan Lake" (Tchaikovsky). Invitation to the Dance (Weber). Hungarian Fantasia (Liszt). Hungarian Rhapsody (Liszt).
4.0—Service from Christiansborg Castle Church. 5.20—Talk: The Domestic Science Course at Aarhus University. 6.0—News. 6.30—Talk from Bergen: Norwegian Industries. 7.0—Chimes. 7.1—"The Hansens"—Sketch (Locher).
7.15—Danish Songs by the "Bel Canto" Male Voice Choir. Conductor: Agersnap. Lille Band (Gram). Sommarljuset (Gram). Høstsang (Lange-Müller). Gensyn med Danmark (Bentzon). Hvor smiler fager den danske Kyst (Ring). Solen blev borte (Agersnap). Angelus (Novi). Spillemaendene (Ring).
7.40—"Don Quixote" (Cervantes)—Reading with Introductory Talk.
8.5—Sonata in D minor (Brahms) by Else Bruun (Violin) and Folmer Jensen (Pfte.). 8.25—The Lolland Beet Industry—Report.
8.50—"Knud Rasmussen"—Cantata (Sandberg-Nielsen), by Astrup (Baritone), the "Bel Canto" Male Voice Choir and Fischer and Hansen (Two Pftes.).
9.5—News.
9.15—Danish Music. Radio Orchestra. Conductor: Grøndahl. Excerpts, "Hakon Jarl" (Hartmann). Overture, "Aladdin" (Horneman). Excerpt, "I Alhambra" (Lange-Müller). Excerpts, "Maskarade" (Nielsen).
10.0-11.30—Olesen Dance Band; at 11.0: Chimes.

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)
1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).
5.0-7.0 a.m.—See Hamburg. 8.0—Protestant Service. 9.0—Hitler Youth Music Festival (Recorded) (For details see 8.0 a.m., Hamburg.) 9.45—Announcements. 9.50—For Mothers. 10.0—"The Great War"—Letter and Poems of Fritz Kudnig.
10.30—See Hamburg.
11.10—Music from Berlin: at 12.0 noon: Weather. 1.0 p.m.—Chess. 1.30—Talk: Photography. 1.45—Records: Light Music. 2.10—For Women. 2.30—Topical.
2.45—See Hamburg.
3.25—Popular Music. Station Orchestra, Conductor: Wilcken. Irmgard Armgart (Soprano). Emil Frickartz (Tenor). Siegmund Roth (Bass). S. O. Wagner (Speaker). 5.10—November Calendar. 5.40—"Wireless in Simon Dach's Home"—Sequence (Hilpert). Music in Old Style (Brust). 6.40 (from Danzig)—Sports.
7.0—Historical Marches—Sequence (Kuhn). Military Band, Conductor: Gareis. Werner Rockel (Compère).
9.0—News. 9.20 (from Danzig)—Football Match Report: Saxony *v.* Danzig.
9.35-11.0—Serenade by the Börschel Band.

LEIPZIG (Germany)
785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
5.0 a.m.—See Hamburg. 7.0—Walter Niemann (Organ). 7.30—Choral Records.
8.0-8.45—See Hamburg.
9.15—Meiningen Railway Workers' Choir, Conductor: August König. 10.0—Variety Records.
11.0—See Berlin. 1.0 p.m.—Weather. 1.5—Talk: Autumn in the Village. 1.25—"Der Aschenpüster"—Fairy Play (Schuder).
1.50—Light Music. Accordion, Concertina and Mouth Organ Bands.
2.40—Talk: From Zittau to Görlitz.
3.0—Variety, from Sebnitz. 5.0—Reading.
5.20—Weber Concert. Paul Reinecke (Tenor). Rümmler (Flute). Hammerla (Clarinet). Rebhan ('Cello). Blumer (Pfte.). Clarinet and Pfte. Duet. Songs: (a) Gebet während der Schlacht, (b) Abschied vom Leben, (c) Mein Vaterland. Trio in G minor.
6.0 (from Dresden)—"Mir Waber warn ne untergihn"—Dialect Sequence with Music (Andert-Ebersbach).
6.55—Sports.
7.0—Concert. Leipzig Symphony Orchestra and Station Choir, Conductor: Hilmar Weber. Gertrud Callam and Rosl Seegers (Sopranos). Paul Reinecke and Louis Kaliger (Tenors). Hans Remagen (Baritone). Overture, "Isabella" (Suppé). Aria, "Die Glücksreiterin" (Smigelski). Duet, "Die Königin vom Naschmarkt" (Smigelski). Excerpts, "Das verwunschene Schloss" (Millöcker). Suite, "Sieben Mädels im Fenster" (Schütt-Hilmar Weber). Ländler and Song, "Das Dorf ohne Glocke" (Künneke). Excerpts, "Aennchen von Tharau" (Strecker).
9.0—News.
9.30-11.0—See Munich.

LILLE (Radio PTT Nord) (France)
1,213 kc/s (247.3 m.); 60 kW. Transmits at intervals from 6.50 a.m.
8.0 p.m.—Sports.
8.15—Records of Marek Weber's Orchestra.
8.30—See Paris (Eiffel Tower). 10.45—News.

MONTE CENERI (Switzerland)
1,167 kc/s (257.1 m.); 15 kW. Transmits at intervals from 10.0 a.m.
5.15 p.m.—Old Italian Arias sung by Lonny Mayer. Herschel (Harpsichord). Quanto è folle quell'amante (Pasquini). La mia fede altrui giuratax (Carissimi). Vengo a stringerti (Scarlatti). Son in dubbio d'amor. Giunta à l'ora fatale.
5.45—Sports. 6.15—Records. 6.45—News.
7.0—Requiem Mass (Perosi) by the Concordia Choir. Conductor: Filipello. 7.30—Zoppo and Negri Poems read by Picozzi.
7.45—Vicari (Organ) from the Church of the Holy Angels. Offertory (Wambach). Invocation (Bach). Elevation (Mendelssohn). Prelude and Grave (Kunc).
8.0—Talk: The Cult of the Dead throughout the Ages.
8.15—Beethoven Concert. Radio Orchestra. Conductor: Casella. Overture, "Egmont." Symphony in A. 9.0-9.15—Sports.

MORAVSKÁ-OSTRAVA (Czechoslovakia)
1,113 kc/s (269.5 m.); 11.2 kW. Transmits at intervals from 5.45 a.m.
4.50 p.m.—German Transmission: Concert by the Station Orchestra. Guest Conductor: Kretschmar. Annie Nacher (Songs). Jeletz (Pfte.). Pfte. Concerto in D Minor (Bach). Concert Aria (Mozart). Serenade (Mozart).
5.50-10.30—See Prague.

MUNICH (Germany)
740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
5.0-7.0 a.m.—See Hamburg. 7.55—Roman Catholic Service.
8.30—Beethoven Recital by Staab (Pfte.). Sonata in E minor. Thirty-Two Variations in C minor. 9.0—"Deutsches Gebet"—Poem (Böhme). Music by Lauer (Recorded). 9.30—"Old Bavarian Burial Customs"—Sequence (Hunkele), with Music by the Munich Folk Song Trio. 10.10—For Peasants. 10.30—Hitler Youth Music Festival (Recorded). (For details see 8.0 a.m. Hamburg.)
11.15—Station Orchestra, Conductor: Milhalovic. Troibner ('Cello). Overture, "Iphigenia in Aulis" (Gluck.) Movement from the Violin Conertoc (Tchaikovsky). Herzeleid (Schwartz). 'Cello: Romance (Stohandl-Pavelko). Ein bisschen traurig (Suk). Symphonic Intermezzo (Mascagni). 11.55—Weather.
12.0 noon (from Nürnberg)—Orchestra. Conductor: Böhm. Overture, Fels im Meer (Rust). Suite, "L'Arlésienne" (Bizet). Finnish Fantasia (Schroeder). Selection, "Madame Butterfly" (Puccini). Two Pieces (Damp). Spanish Caprice (Kutsch).
1.0 p.m.—"Das rote Moor"—Fairy Story after Irish Legends (Glas). 1.45—Trio in F (Gade) by the Station Chamber Trio. 2.5 (from Nürnberg)—All Saints' Day Concert. Lissy Bühler (Contralto), Fritz Zartner (Organ), and Franz Kost (Speaker). 2.40—War Reminiscences by Martin Breitenacher.
3.0—See Stuttgart. 5.0—Talk: Underground Munich.
5.20 (from Nürnberg)—Orchestra. Conductor: Böhm. Lissy Bühler (Contralto). Suite, Der Bundschuh fliegt (Schneidt). Fränkisches Leben (Böttcher). Suite, Um fränkisches Geschehen (Günther). Ritterliche Ouvertüre (Scharrer).
6.35—Call of Youth. 6.40—Sports.
7.0—Station Orchestra. Conductor: Winter. Carola Farma (Soprano). Marius Andersen (Tenor). Gustav Havemann (Violin). Overture, "Alcestis" (Gluck). Aria, "Fritjof" (Bruch). Violin Concerto (Kempff). Venetian Suite (Wolf-Ferrari). Aria, "Fidelio" (Beethoven). Prelude, Act III, "Palestrina" (Pfitzner). Songs (R. Strauss): (a) Allerseelen, (b) Cäcilie. Death and Transfiguration (R. Strauss).
9.0—Time; News.
9.30-11.0—Serenade. Station Orchestra, Conductor: Milhalovic. Ludwig Kusche and Ludwig Schmidmeier (Pftes.).

OSLO (Norway)
260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trøndelag, 629 kc/s (476.9 m.).
8.0 a.m.—News. 8.5—German Lesson. 8.30—English Lesson. 9.0—Symphony in F flat minor (Haydn) on Records. 9.25—Service. 11.45—News.
12.0 noon-1.0 p.m.—Station Symphony Orchestra. Conductor: Kielland. Symphony in C minor (Beethoven). Symphonic Poem, Don Juan (Strauss). 3.10—Daasvand (Norwegian Sacred Songs). 3.40—Talk: Norwegian Terminology.
4.0—Station Orchestra. Conductor: Fjeldstad. Overture, "Djamileh" (Bizet). Selection, "Mignon" (Thomas). Suite (Olsen). Hebrew Melody (Achron). French Serenade (Grieg). The Swan (Palmgren). Potpourri (Hruby).
5.0—Report: International Football Match, Holland *v.* Norway, from Amsterdam (Recorded). 5.15—Talk.
5.30—Bergh (Violin) and Synnøve Aasen (Pfte.). Suite for Pfte., Nordland Pictures (Johansen). Passacaglia

(Sammartini). Rondino (Kreisler). Capriccioso (Böhm). Norwegian Dance (Grieg-Flesch). Pastorale (Stravinsky). Russian Song and Dance (Sasonov).
6.10—News. 6.30—Time; Norwegian History Lesson.
6.55—Records of Gaspar Cassado ('Cello). Minuet (Haydn). Ode (Tcherepnin). Requiebros (Cassado). Tonadilla (de Lasorna). Arlequin (Popper).
7.10—Talk.
7.30—"Down the Rhine"—Sequence with Choir and Orchestra. 8.40—News. 9.0—Topical. 9.15—Sports. 9.30-10.30—Dance Records.

PARIS (Eiffel Tower) (France)
1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
5.30 p.m.—Television. 7.30—Racing. 7.40—Topical. 8.15—News.
8.30—Liszt Anniversary Concert. Ina Marika (Pfte.). Lucienne Astruc (Songs). Rhapsody. Pensée des morts. Pater Noster. Hymne de l'enfant à son réveil. Songs: (a) Quels rêves doux et merveilleux, (b) Oh! quand je dors. Polonaise. Talk by Gustave Samazeuilh. Rhapsody. Two Songs. Funérailles.

PARIS (Poste Parisien) (France)
959 kc/s (312.8 m.); 60 kW.
7.50 a.m.—Call. 7.52—Records. 8.2—News. 8.26—Announcements. 8.36—Song Records. 9.1—News. 9.25—Records. 9.30—For Young People. 9.50—Records. 10.50—Folies-Bergère Orchestra. Conductor: Darrieux. 11.35—"Winter"—Records. 11.50—Records. 12.5 p.m.—Records for Children. 12.15—Guignol. 12.45—Charco and Matina. 1.2—Raymond Souplex and Jane Sourza. 1.30—Records. 1.45-2.0—Light Music.
2.45-3.25—Commentary on the Second Half of the Rugby Match, Germany v. France, at Hanover. 5.30—Records: Light Music. 7.0—News. 7.25—Operetta Records. 7.35—Records: Viennese Music by the Vienna Salon Orchestra. 7.50—Frères Jacasse. 7.55—Song Records. 8.5—Paul Reboux. 8.20—Light Music. 8.35—Mlle. Bordas. 9.0—Amateurs at the Microphone.

Exclusive "World-Radio" Picture.

Mdlle. Germaine Cernay, the "Eurydice" in Milhaud's opera (Paris PTT, 8.30 p.m.)

9.30—"Follow the Guide"—Sketch (Diamant-Berger-Nohain). 9.55—Willie Lewis Dance Band. 10.30-11.30—Records: Light Music.

PARIS (PTT) (France)
695 kc/s (431.7 m.); 120 kW.
6.50-9.46 a.m.—News; Topical. 9.46—Dialogue (Wisner). 10.0—Pascal Orchestra. Germaine Parat (Songs). Cantrelle (Violin). Pascal ('Cello). Tollet (Pfte.). 12.0 noon—Light Music and Dance Music by the Derveaux Orchestra. 12.45 p.m.—News. 1.0—Orchestra (contd.). 2.0—Records: Marches and Light Music. 3.0—Symphony Concert. 5.0—Records: Serenades.
5.30—"Le miracle de l'enfant Bavard"—Play in Three Acts (Ghéon). 6.30—News; Topical. 7.45—Lydia Chaliapin-Jean Rieux Programme. 8.15—Sports.
8.30—Concert and Opera. Part I: Orchestra. Conductor: Rosenthal, Micheline Kahn (Harp) and others. Overture, "Iphigenia in Aulis" (Gluck). Harp and Orchestra: Choral and Variations (Widor). Ballad (Jaubert). Excerpt, "Rédemption" (César Franck). Part II: "Les malheurs d'Orphée"—Opera in Three Acts (Milhaud). In the interval: Readings (Boileau). 10.30—News.

PARIS (Radio-Paris) (France)
182 kc/s (1,648 m.); 80 kW.
7.0 a.m.—Records: Arabesques. 7.15—News. 7.45—Gym. 8.0—Records: French Classical Music. 8.30—Records: Symphony Music. 8.40—Italian Lessons. 9.20—English Lessons. 10.0—Pontifical High Mass from Rouen Cathedral. 11.45—Records.
12.15 p.m.—Popular Music by the Pasdeloup Concert Orchestra. Conductor: André. Excerpts, "The Prophet" (Meyerbeer).
12.30—Roman Catholic Address. 12.50—News.
1.0—Popular Music (contd.). Gaston Rey (Songs). March, "Athalie" (Mendelssohn). Overture, To the story of the lovely Melusina (Mendelssohn). Songs: Overture, "La Dame blanche" (Boïeldieu). Suite, Petites musiques (Fl. Schmitt). Prayer and Temple Dance (Grieg). Excerpts, "Martha" (Flotow).
2.0—For Young People.
3.0—Porée Orchestra. Odette Bergeal (Songs). Overture, "Egmont" (Beethoven). Pavane pour une Infante défunte (Ravel). Prelude, Cavatina and Prayer, "The Pearl Fishers" (Bizet). Orientale (Cui). Song. Excerpts, "Le Chemineau" (Leroux). Still wie die Nacht (Böhm). First Movement from the Pastorale (Moreau). Violin Piece. Intermezzo, "Carmen" (Bizet). Song. Prelude and Song, "L'attaque du moulin" (Bruneau). Prelude, "Messidor" (Bruneau). Barcarolle (Offenbach). Prelude (Haydn-Wood). Song. Suite, L'Arlésienne (Bizet).

SUNDAY (November 1)

7.0—"Gracieuse et Percinet" (Crozière) by Bilboquet and Troupe.
7.30—The Bayan Singers. Simon's Prayer (Stokin). Song of the Cherubins (Lomakin). Pater Noster (Scheremetiev). Praised be the Lord (Archangelsky). Glory to God (Bortniansky). Repent (Bortniansky). Kyrie Eleison (Lvovsky). Cathedral Bells (Lvovsky).
8.0—Maurice Maréchal ('Cello). Suite (Bréval). Elégie (Fauré). La fileuse (Fauré). Spanish Dance (Falla). Spanish Serenade (Glazunov).
8.30—News.
8.45—"The Passing of the Third Floor Back"—Play in Three Acts (Jerome K. Jerome). French Translation by Andrée Méry.
10.45-12.15 a.m. (Monday)—Time; French Music by the Krettly Orchestra. Suite française (Périlhou). Recueillement (Gallon). Ronde de nuit (Boëllmann). Berceuse du souvenir (Delmas). Nocturne (Debussy). Suite (Saint-Saëns). Aux étoiles (Duparc). Chant des matelots (de Sévérac). Cloches dans la brume (Spaline). Esquisses (Gaubert).

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The author, H. H. Cowley, who holds the Diploma of Engineering of the University College, Nottingham, has had a wide and varied experience in the practice of wiring.

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General Principles of Electrical Conductivity, Materials, Wire Gauges, Insulators, Insulation and Resistances, Systems of Wiring, Safety Fuses, Distribution of Fittings, Lamps, Illumination, Heaters, Cookers, Small Motors, Appliances, Wiring Layouts and Wiring for Lighting, Heating, and Cooking, Temporary Wiring, Measuring Instruments, Meters and Mains, Bells and Signals, Domestic Telephones, Testing Wiring for Wireless Installations, Power Amplifiers, Public Speech and Talking-Picture Equipment, Electric Motors and Generators, Principle of Neon Illumination, The Workshop, Specifications, Abbreviations and Definitions.

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SUNDAY (November 1)

PRAGUE (Czechoslovakia)
638 kc/s (470.2 m.); 120 kW.
5.45 a.m.—Call; Gym; Music; News. **6.30**—Karlsbad Municipal Orchestra. **7.20**—Police Messages. **7.30**—Sacred Music. Station Choir and Wiedermann (Organ). **7.55**—English Lesson. **8.10**—Sonata (Jeremiás) by Kucera (Viola) and Maxian (Pfte.). **8.40**—For Workers.
9.0—FOC Orchestra. Conductor: Pekárek. Alla marcia (Smatek). Overture, "Il Guarany" (Gomez). Selection, "Tiefland" (d'Albert). Waltz, "Lazy John" (Nedbal). Triumphal March, "Aïda" (Verdi).
9.40—Literary Talk with Reading: Italy. **10.10**—Books.
10.15—Bach Concert. Station Orchestra, Kabelac Chamber Choir and others. **11.0**—Chimes; Record. **11.10**—News. **11.20**—Orchestra and Violin from Kosice. **12.25 p.m.**—For Farmers. **12.40**—Talk. **12.50-1.5**—For German Farmers. **1.25**—Talk.
1.30—"Tales of Hoffmann"—Opera in Three Acts (Offenbach), from the State Opera. Conductor: Charvát. **4.10**—Poems. **4.25**—Records. **4.35**—Talk and Review in German. **4.50**—Orchestra, Songs and Pfte. from Moravská-Ostrava. **5.50**—News (German); Record. **6.0**—News.
6.5—All Saints' Day Programme of Czech Poems and Music. Poem (Wolker). Movement from the Trio in G minor (Smetana).
6.20—See Brno. **7.0**—Talk on the following Concert. **7.5**—Requiem (Verdi). Czech Philharmonic. Conductor: de Sabata. Hlahol Vocal Ensemble, Wiederman (Organ), and others. In the interval: Talk. **9.0**—Time; News. **9.20**—Record. **9.25**—News (German). **9.30-10.30**—Records.

RADIO-NORMANDIE (France)
1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Music. **7.10**—News. **7.50**—Records. **8.0**—Light Music. **8.30**—Sacred Music. **8.45**—Military Band. **9.0**—Songs. **9.15**—Records. **9.30**—Light Music. **9.45**—Records. **10.0**—Waltzes. **10.15**—Light Music. **10.30**—Records. **10.45**—Light Music. **11.0**—Records. **11.15**—Light Music. **11.30**—Ray Ventura and his Collegians. **11.45**—Dramatic Excerpts. **12.25 p.m.**—Roman Catholic Address. **12.40**—News.
1.0—Concert. **2.0**—Records. **2.30**—Light Music. **2.45**—Records. **3.0**—Light Music. **3.30**—Records. **3.45**—Light Music. **4.0**—Records. **4.30**—Concert. **5.0**—Records. **5.15**—Light Music. **5.30**—Records. **5.45**—Light Music. **6.15**—Records. **6.30**—Concert. **7.0**—Records. **7.15**—Light Music. **7.30**—Concert; at **7.40**: News. **8.30**—Sports.
8.45—Operetta Music. Excerpts, "Les noces de Jeannette" (Massé). "The Gipsy Baron" (Strauss), "The Desert Song" (Romberg), "A Waltz Dream" (Straus), "Enlevez-moi" (Gabaroche), "La Poule" (Christiné), "Simone est comme ça" (Moretti), "Azor" (Gabaroche), "Bonsoir Paris" (Cazaux), "Faites ça pour moi" (Gabaroche), "The Gipsy Princess" (Kálmán).
10.0—Records. **10.15**—Light Music. **10.30**—Dance Records. **10.45**—Light Music. **11.0**—Records. **11.15**—Light Music. **11.30**—Records. **12.0 m't**—Orchestra. **12.30-1.0 a.m. (Monday)**—Classical Music.

RADIO-ROMANIA (Brasov) (Romania)
160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)
713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2) and Turin (No. 2), 1,357 kc/s (221.1 m.).
7.30-7.50 a.m.—News. **9.0**—Rural Programme.
10.0—See Turin. **11.0**—Bible Reading. **11.20**—See Turin. **11.45**—News.
12.0 noon—"Moschettieri 1936." **12.30 p.m.**—Announcements; Records. **12.40**—Light Music. Conductor: Barzizza. **1.15-2.0**—Songs and Instrumental.
2.15—Records; Sports. **2.30**—Football Match Report. **3.15**—Sports; Records.
3.30—Orchestra. Conductor: Culotta; at **4.15**—Sports. **5.30-6.0**—Sports; Records. **6.20**—Dopolavoro Notes. **6.30**—Records. **7.5**—Time; News. **7.30**—Sports; Records. **7.40**—Introductory Talk to the following Programme.
7.45—"Conchita"—Four-Act Opera (Zandonai). Conductor: The Composer. Chorus Master: Consoli. Gianna Pederzini as Conchita. In the intervals, Recitations; News (English); Film Review and News. **10.30-11.0**—Dance Music.

SOFIA (Bulgaria)
850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from **5.0 a.m.**
11.45 a.m.—Operetta Music. **12.20 p.m.**—Notes. **12.25-1.0**—Light Music and Dance Music. **3.0**—For Peasants. **3.30**—Stoyanov (Songs). **4.0**—For Children. **5.0**—Dance Music. **5.15**—Light Music. **5.50**—Popular Orchestral. **6.25**—Symphony Music. **6.45**—Concert. **7.45**—News. **8.0-9.30**—Light Music and Dance Music; at **8.30**: Notes.

SOTTENS (Switzerland)
677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
8.55 a.m.—Chimes. **9.0**—Protestant Service. **10.0**—Records: Classical Music. **11.30**—News. **11.40 a.m.-1.0 p.m.**—Records.
5.0—Mendelssohn Concert. Radio Suisse romande Orchestra, Conductor: Haug. Calm Sea and Prosperous Voyage. Excerpts, "A Midsummer Night's Dream." Scottish Symphony.
6.0—Roman Catholic Address.
6.30—Variations on a Folk Theme (Ochs) by the Radio Suisse romande Orchestra, Conductor: Haug. **6.50**—News. **7.0**—Sports.
7.20—"Faust"—Five-act Opera (Gounod). Orchestra and Opera Choir. Conductor: Busser. Cast: Vezzani as Faust, Journet as Méphisto, Musy as Valentin, Montfort as Siebel, Cozette as Wagner, Mlle. Berthon as Marguerite, and Mlle. Coffier as Marthe.
9.45-10.15—Tourist Talk: Canton Valais.

STOCKHOLM (Sweden)
704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.), and Boden, 392 kc/s (765 m.).
8.0 a.m.—For Farmers. **8.30**—Music Talk. **9.15-9.45**—Talk. **10.0**—Service from Kalmar Cathedral. **11.40**—News. **2.0**—For Children. **2.30**—Records. **3.25**—Reading. **4.0 (from Göteborg)**—Evensong.
5.0—Scandinavian Music. Radio Orchestra. Conductor: Wiklund. Jussi Björling (Songs). Overture, "The Maid of Orleans" (Söderman). Songs: (a) Trollsjön (Söderman), (b) Tonerna (Sjöberg). Midsommarvaka (Alfvén). Prelude, "Sigurd Slembe" (Svendsen). Pieces (Wiklund): (a) In Folk Style, (b) Andante espressivo, (c) Allegro molto ritmico. Symphonic Dances (Grieg).
6.15—News.
6.30—"London Wall"—Comedy (John van Druten; trans. Palle Brunius).
8.0—Sigurd Rascher (Saxophone) and Meyer-Radon (Pfte.), from Malmö. Sonata (Bach). Pfte. Etudes (Schumann). Saxophone: (a) Canzonetta (Pergament), (b) Variations on a Corelli Theme (Glaser).
8.45—News. **9.0**—Topical.
9.10-10.0—Act IV "Il Trovatore"—Opera (Verdi), from the Royal Opera. Conductor: Bendix. Cast: Jussi Björling. Inez Köhler, Brita Ewert, Einar Larsson.

E.N.A.

Rouen Cathedral, from which Radio-Paris broadcasts a service at 10 a.m.

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STRASBOURG (France)
859 kc/s (349.2 m.); 100 kW.
7.0 a.m.—News. **7.30**—Records. **7.40**—News (German). **8.0**—Gym. **8.30**—News (German).
9.30—Pontifical High Mass for All Saints' Day, from Strasbourg Cathedral. Celebrant: Mgr. Ruch, Bishop of Strasbourg. **10.45**—Protestant Service (German). **11.30**—Roman Catholic Service, with Address by Mgr. Ruch. **12.0 noon**—Records. **12.50 p.m.**—Topical; News.
1.15—Orchestra. Conductor: Bour.
3.0—See Paris (PTT). **4.45**—Medical Talk: Vaccination.
5.0—Service for the Dead (in German). Cantatas (Bach): (a) Herr, wie du willst, (b) Komm, du süsse Todesstunde, from St. Thomas' Church. St. Thomas' Choir. Station Orchestra, Conductor: Béron. Mlle Forster (Soprano). Mlle Schaaf (Contralto). Schweitz (Tenor). Nussbicker (Bass).
6.30—Topical. **7.15**—Records of Miguel Candela (Violin). **7.30**—News. **7.45**—News (German). **8.0**—Sports. **8.20**—Press Review (German).
8.30—See Paris (PTT). **10.30**—News. **11.0**—News (German).

STUTTGART (Germany)
574 kc/s (522.6 m.); 100 kW.
5.0 a.m.—See Hamburg. **7.0**—Weather; Gym. **7.25-7.45**—For Peasants. **8.0-8.30**—Protestant Service.
9.0—Hitler Youth Music Festival (Recorded). (For details see 8.0 a.m. Hamburg.) **9.45**—Lecture Recital: Donizetti.
10.30—See Hamburg.
11.10—Music from Berlin; at **12.0 noon-12.15 p.m.**, Topical Reading. **12.50**—Announcements. **1.0**—"The Nightingale"—Fairy Play (Andersen-Wollmann); "The Sun and the Moon"—Fairy Play (Meurin). **1.45**—From Shops and Workshops.
2.0—Brazilian and Japanese Folk Songs, from Rio de Janeiro and Tokio (Recorded). **2.20**—Faiss (Lute). **2.30**—Choir from Heidenheim. Conductor: Süssmuth.
3.0—Light Music from Saarbrücken. Saarbrücken Orchestra and Theatre Choir, Grete Lüddecke (Contralto), Hans Wocke (Baritone), Else Heinrich and Fritz Griem (Pftes.). **5.0**—"Hunting"—Reading. In the intervals: Records.
5.40—Records of the London Philharmonic, Conductor: Sir Thomas Beecham. Overture, "La scala di seta" (Rossini). Gipsy Dance and March, "The Fair Maid of Perth" (Bizet). Overture, "The Thieving Magpie" (Rossini).
6.10—Report: The Rugby Match, Germany *v.* France, at Hanover; Sports Notes.
6.40—"Don Giovanni"—Opera in Two Acts (Mozart). Station Choir and Orchestra, Conductor: Keilberth. Karl Hammes as Don Giovanni, Maria Reining as Donna Anna, and Julius Patzak as Don Ottavio. Commentary by Heinz Laubenthal. **9.0**—Time; News. **9.30**—See Munich.
11.0-1.0 a.m. (Monday)—Serenade (Records). Part I. Schubert Music (1815-1819). Station Orchestra and Choir, Conductor: Leonhardt. Ria Ginster (Soprano), Hubert Giesen (Pfte.) and Others. Pfte.: Dances. Soprano: The Trout. Trout Quintet in A. Four Songs. Mass in G. Part II. Symphony in F minor (Bruckner). Conductor: Martin Hahn.

TOULOUSE (Radio-Toulouse) (France)
913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from **11.0 a.m.**
6.50 p.m.—News. **7.0**—Dance Music. **7.15**—Film Music. **7.40**—Viennese

Orchestra. 7.55—News. 8.10—Excerpts, "Cavalleria Rusticana" (Mascagni). 8.25—Variety. 8.40—Tango Songs. 8.55—News. 9.10—Fantasy. 9.35—Light Music. 9.55—News. 10.0—Excerpts, "The Damnation of Faust" (Berlioz). 10.15—Village Band. 10.40—Film Music. 10.55—News. 11.0—Dance Music.

11.15—Operetta Songs.

11.40—Orchestra. 11.55—News. 12.5 a.m. (Monday)—Light Music. 12.30—Announcements.

TURIN (No. 1) (Italy)
1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).

7.30 a.m.—News. 9.0—Rural Programme.

10.0—Mass from the Church of the Annunciation, Florence. 11.0—Bible Reading.

11.20—Records: Chamber Music.

11.45—News.

12.0 noon-1.15 p.m.—See Rome.

2.15-6.30—See Rome. 6.30—Sports; Records. 7.5—Time; News. 7.30—Records.

7.40—"Partenza per l'Asia"—One-Act Play (D'Ambra). 8.10—News (German).

8.20—Popular Concert. Conductor: Ferrero. Overture, "Susanna's Secret" (Wolf-Ferrari). Petite Suite on Hebrew Themes (Weprik). Spanish Rhapsody (Ravel). Prelude, "The Mastersingers" (Wagner). 9.30—Announcements.

9.40 — Dance Music. 10.0 — News. 10.15-11.0—Dance Music.

VIENNA (Austria)
592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).

7.0 a.m.—Motto. 7.5—Weather; Programme announcements. 7.10—Gym. 7.30—Hints for the Week. 7.45—Records. 9.0—Service from the Franciscan Church. 10.0—For Country People. 10.40—Announcements.

10.45—Vienna Chamber Orchestra. Conductor: Auderieth. Marianne Brünner (Pfte.). Overture, Fingal's Cave (Mendelssohn). Pfte. Concerto in C minor (Beethoven). Serenade (Franckenstein).

11.55 a.m.-1.20 p.m.—Station Orchestra. Conductor: Schönherr. French Military March (Saint-Saëns). Overture, "Das goldene Kreuz" (Brüll). Abschiedswalzer (Straüss). Schwanengesang (Andress). Harlekin (Zador). Vision (Zador). Hopak (Tchaikovsky). Ave Maria and March, "Othello" (Verdi). Wagner Fantasia (Morena).

2.0—News. 2.15—Books. 2.40—Talk: The Engelszell Monastery. 3.5—Talk.

3.30—Lorenz Herzog reads. Introductory Talk by Ernst Holzmann.

4.0—Concert from the Konzerthaussaal. Station Orchestra. Conductor: Konrath. Steiner (Violin). Egmont Overture (Beethoven). Violin Concerto in D (Mozart). The Moldau (Smetana). Serenade (Volkmann). The Nutcracker Suite (Tchaikovsky).

6.0—Time; Programme Announcements; Sports.

6.10—"Twilight Dreams"—Fantasia on Records. 7.0—Ballad. 7.10—"Gevatter Tod"—Play (Soeser). 8.20—Meditation. 9.10—News.

9.30—Luise Helletsgruber (Songs). Songs (Cornelius): (a) Ein Myrtenreis, (b) Der Liebe Lohn, (c) Vorabend, (d) Am Morgen, (e) Mein Freund ist mein und ich bin sein. Mondnacht (Schumann). Frühlingsnacht (Schumann). Von ewiger Liebe (Brahms). Wiegenlied (Brahms) In der Frühe (Wolf). Nun lass uns Frieden schliessen (Wolf). Marienlied (Marx). Und gestern hat er mir Rosen gebracht (Marx). Schlechtes Wetter (Strauss). Cäcilie (Strauss). Aria, "The Magic Flute" (Mozart). Aria, "Louise" (Charpentier).

10.10-10.50—Records of Famous Artists.

WARSAW (Poland)
224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.); Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).

7.0 a.m.—Time; Hymn. 7.3—For Farmers. 7.30—News. 8.0 (from Lódz)—Service. 9.30—Records. 10.57—Time; Fanfare.

11.3—Station Orchestra. Conductor: Górzyński. Nolier-Mazurkiewicz (Songs). Polonaise (Wronski). Overture, "The Nuremberg Doll" (Adam). Piece (Rust). Waltz (Friedman). Songs, "Les Huguenots" (Meyerbeer) and "Il Trovatore" (Verdi). Barcarolle (Grünfeld). Dance (Wolf-Ferrari). Ballad (Debussy). Songs: (a) Ich liebe dich (Grieg), (b) La harpiste (Lipski), (c) Le cadeau (Zeleński). Concert Waltz (Górzyński). Intermezzo, Fiametta (Brusso). Selection, "Das Blumenwunder" (Künneke) Victoria regia (Künneke). Songs: (a) Si tu le voulais (Tosti), (b) Tu es trop belle (Campana), (c) Waltz, "A Waltz Dream" (O. Straus). Selection, "Turandot" (Puccini). Episode (Rust). Spanish Song (Albeniz). Serenade (Löhr); at 12.0 noon: Theatre Review.

SUNDAY (November 1)

1.0 p.m.—Report. 1.30—Records. 2.30—For Farmers. 3.0—Announcements. 3.30—Records. 3.45—Poetry.

4.0 (from Katowice)—Symphony Concert. The Musical Society Orchestra. Conductor: Dymmek. St. Allin (Pfte.). Concerto Grosso in G minor (Handel). Pfte. Concerto in E flat (Beethoven). Pfte. Excerpt, "Céphale et Procris" (Grétry). Adagietto (Mahler). The Eighth Symphony (Beethoven); at 5.0: Topical.

6.0—Act 2, "Les Noces"—Play (Wyspianski). 6.45—"In memoriam"—Programme from the Tomb of the Unknown Warrior at Warsaw. 7.15—Programme Notes. 7.20—Sports Notes. 7.40—Political Review. 7.50—News. 8.0—Records: Polish Music. 8.30 (from Lódz)—Literary Programme.

8.45—Italian Pfte. Music by Margaret Trombini-Kazuro. Sonata in D (Paradisi). Sixteenth Century Music (arr. Respighi). Nenia (Sgambati). Nocturne (Sgambati). Image (Fano). Waltz, Alt-Wien (Castelnuovo-Todesco). Tarantella (Castelnuovo-Todesco).

9.15 — Station Symphony Orchestra. Conductor: Straszynski. Snieckowski (Oboe). Overture No. 3 in G (Vivaldi). Oboe: Prelude to a Cantata (Bach). The Unfinished Symphony (Schubert). March (Karlowicz). Romance (Karlowicz). Elegy (Mlynarski).

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MONDAY November 2

4 p.m.

BEROMÜNSTER and **SOTTENS** Chamber Music. 4.50—Music **BUCHAREST** and **RADIO-ROMANIA**, Radio Orchestra. **BUDAPEST (1)**, Talk. 4.30—Homeros Blind Choir.
DEUTSCHLANDSENDER, Everyday Experiences. 4.10—Light Orchestral.
HAMBURG, Dialect Programme with Songs by Jakschtat (Bass-Baritone) 4.45—Talk. **HILVERSUM (1,875 m.)**, 4.40—Parker (Organ). **HILVERSUM (301.5 m.)**, 4.10—Lecture Recital: "Tosca" (Puccini).
PARIS (PTT), Mulet (Organ). 4.30—"The Père Lachaise Cemetery"—Radio Pilgrimage with Music and Poems.
RADIO-NORMANDIE, Concert. 4.45—For Children. **ROME** and **TURIN**, News. 4.15—Sacred Music. 4.55—Poems.
STOCKHOLM, 4.5—Lecture-Recital: Danish Folk Songs. 4.35—Reading. 4.55—Scandinavian Music by the Norrköping Orchestra. **STRASBOURG** and **RADIO-PARIS**, Octets, Pfte.
VIENNA, 4.40—Excerpts, Liturgy of the Dead, by the Vienna Seminary Schola Gregoriana.

5 p.m.

ATHLONE, 5.30—Children's Hour.
BERLIN, Records. **BEROMÜNSTER**, For Children. 5.30—Music. 5.40—Talk: Maxim Gorki. **BRESLAU**, Band. 5.50—Notes. **BRUSSELS (1)**, Quartet and Pfte. **BRUSSELS (2)**, Light Orchestral. 5.45—For Children. **BUCHAREST** and **RADIO-ROMANIA**, Talk, Radio Orchestra. 5.55 — Educational. **BUDAPEST (1)**, Choir (contd.). 5.30—Economics. 5.55—Wehner (Organ).
DEUTSCHLANDSENDER, Books. 5.20—Suite for Violin and Pfte. (Ries). 5.40—Visit to the Reich Institute of Interpreters.
HAMBURG, Records. 5.45—Shipping. **HILVERSUM (1,875 m.)**, Parker (Organ). 5.40—Records. **HILVERSUM (301.5 m.)**, Lecture-Recital (contd.). 5.10—Light Music
KALUNDBORG, Monologues with Pfte. 5.15—Weather. 5.35—English. **KÖNIGSBERG**, See Stuttgart. 5.50—Notes.
LEIPZIG, Light Orchestral. 5.40—Report: The School of Journalism at Leipzig University.
MUNICH, "The Silent Forests"—Musical Sequence.
PARIS (PTT), Pasdeloup Concert Orchestra. 5.30—Talk. 5.37—Records. 5.45—Talks.
RADIO-NORMANDIE, Records. 5.15—Military Music. 5.30—Organ. **RADIO-PARIS**, Anniversaries. 5.10—Talk. 5.30—Pasdeloup Concert Orchestra. Lucienne Royer (Violin).
SOTTENS, For Women. 5.15—Talk. 5.30—Esperanto. 5.35—Chess. 5.50—Music Lesson. **STOCKHOLM**, Scandinavian Music (contd.). 5.50—Dialogue. **STRASBOURG**, Records. 5.15—Talk. 5.30—Light Orchestral. **STUTTGART**, **COLOGNE**, **FRANKFURT**, Concert.
VIENNA, Liturgy of the Dead (contd.). 5.10—Burgenland Programme. 5.35—English.

6 p.m.

ATHLONE, Children's Hour. 6.15—Around the Counties—Dublin and Kilkenny. Songs, Traditional Fiddle. 6.45—Stocks, News.
BERLIN, Reading. 6.15—Pfte. (Haydn, Bach-Liszt). 6.45—Echoes. **BEROMÜNSTER**, Time, Music. 6.30—News. 6.45—Address. **BRESLAU**, Dialect Play. 6.45—Topical. **BRUSSELS (1)**, Talk. 6.15—Classical Records. 6.45—Maurice de Groote (French Songs). **BRUSSELS (2)**, For Children. 6.30—Roussel Records. 6.45—For Ex-Servicemen. **BUCHAREST** and **RADIO-ROMANIA**, Educational. 6.15—Song Records. 6.50—French Songs. **BUDAPEST (1)**, Wehner (Organ). 6.45—Poems.
COLOGNE, See Stuttgart. 6.45—Notes.
DEUTSCHLANDSENDER, Old and New Operetta Music—Records, Songs, Pfte. 6.45—Topical.
FRANKFURT, Folk Music. 6.40—Topical. Markets.
HAMBURG, Marine Artillery Band. 6.45—See Munich. **HILVERSUM (1,875 m.)**, Records. 6.10—Letters, Notes. **HILVERSUM (301.5 m.)**, Light Music. 6.10—Dance Band. 6.40—Pfte., Violin.
KALUNDBORG, News. 6.30—Talk.
KÖNIGSBERG, Philosophical Sequence. 6.25—Talk. 6.45—Topical.
LEIPZIG, Military Band. 6.50—Review.
MUNICH, "My Friend the Minister of State"—Play with Music (Humbach). 6.45—Talk.
OSLO, 6.30—"Aunt Tramer's Will"—Farce (Høyer).
PARIS (PTT), Orchestra (contd.), Lucienne Royer (Violin). 6.30—News, Reviews. **POSTE-PARISIEN**, Mozart Records. 6.30—Exchange, Topical. 6.55—Records. **PRAGUE**, News. 6.10—Orchestra, Violin.
RADIO-NORMANDIE, Children's Corner. 6.40 — Talk, Racing. **RADIO-PARIS**, Talks. 6.30—Orchestra (contd.). **ROME**, Sports and Talk (French). 6.20—News in Foreign Languages.
SOTTENS, Music Lesson. 6.15—Radio Magazine. 6.50—News.
STOCKHOLM, Dialogue. 6.15—News. 6.30—Potpourri by the Radio Dance Band. **STRASBOURG**, For Gardeners (German). 6.15—Debussy Records. 6.30—News, Reviews. **STUTTGART**, Concert. 6.45—Baden Echoes.
TURIN, News in Foreign Languages.
VIENNA, News. 6.15—Records of Famous Artists. 6.50—"All Souls Day in the Cistercian Monastery, Stams"—Report.
WARSAW, Act III, "Les Noces"—Play (Wyspiánski).

7 p.m.

ATHLONE, Autobiography. 7.15—How Music differs from all other Arts—The Composer at Work. Ua Braoin and Station Orchestra. 7.55—Talk.
BERLIN, News. 7.10—Symphony Concert. Conductor: Schuricht. Gisela Binz (Pfte.) (Fleischer, Franck) Beethoven). **BEROMÜNSTER**, 7.5—Zürich Tonhalle Orchestra. Conductor: Schoeck. Saillet (Oboe). 7.45—Talk. **BRESLAU**, News. 7.10—"The Autumn Lawsuit"—Burlesque (Albrecht); Music by Sattler. **BRUSSELS (1)**, Songs (contd.). 7.15—Reviews. 7.30—News. **BRUSSELS (2)**, Schubert Records. 7.30—Talk. **BUCHAREST** and **RADIO-ROMANIA**, French Songs. 7.10—Talk. 7.15—Doric Quartet (Respighi). **BUDAPEST (1)**, Poems. 7.10—Opera Orchestra. Conductor: Rajter (Bach-Siklos, Brahms, Liszt, Mossanyi, Schubert).
COLOGNE, News. 7.10—Weekly Review.
EIFFEL TOWER, News. 7.20—Foreign Affairs. 7.45—Press Review. 7.55—Home Affairs.
HAMBURG and **MOST GERMAN STATIONS**, News. 7.10—"The Ministers of various Denominations: My Sect. **STRASBOURG**, News. 7.15—Franck and Fauré Records. 7.30—Time, News (French, German).
VIENNA, Report (contd.). 7.10—Requiem (Mozart) by the "Hofmusikkapelle." Conductor: Grossmann.
WARSAW, For Soldiers. 7.30—Contralto. 7.50—News.

8 p.m.

ATHLONE, Talk. 8.10—See Vienna.
BERLIN, Concert (contd.). **BEROMÜNSTER** and **SWISS STATIONS**, For Swiss Nationals abroad. Part I, Hans Huber Commemoration. Part II, Folk Songs of Italian Switzerland. Part III, Programme with Jaques-Dalcroze. **BRESLAU**, "The Autumn Lawsuit"—Burlesque (contd.). **BRUSSELS (1)**, "Kaatje"—Opera (Buffin) from the Théâtre de la Monnaie. Conductor: de Thoran. 8.55—Records. **BRUSSELS (2)**, Notes. 8.5—Light Orchestral. **BUCHAREST** and **RADIO-ROMANIA**, Books. 8.5—Romanian Songs. 8.30—News. 8.45—Dinicu Orchestra (contd.). 8.55—Records.
COLOGNE, Review (contd.). 8.10—Quartet and Pfte. (Schubert, Schumann, Grieg, Straesser).
EIFFEL TOWER, Home Affairs. 8.30—Talk. 8.45—Orchestra and Raugel Choir. Part I, Liszt. Part II. French Music.
FRANKFURT and **DEUTSCHLANDSENDER**, See Hamburg. 8.10—Band: Sailors' Marches and Songs.
HAMBURG, "The von Spee Squadron" (contd.). 8.10—"Johannes Brahms and Klaus Groth"—Musical Sequence. **HILVERSUM (1,875 m.)**, Orchestra (contd.); at 8.45: Talk. **HILVERSUM (301.5 m.)**, Records. 8.40—Flemish Humour.
KALUNDBORG, "L'Avare" (contd.).
KÖNIGSBERG, See Hamburg. 8.10—Chamber Music and Songs of Austrian Composers.
LEIPZIG, See Hamburg. 8.10—Seventh Symphony in E (Bruckner). Leipzig Symphony Orchestra. Conductor: Weisbach. **LILLE**, Cortot Records. 8.15—Talk. 8.30—Light Orchestral, Soprano, Tenor. **MUNICH**, See Hamburg. 8.10—Opera Aria Records.
OSLO, Farce (contd.). 8.10—Foreign Affairs. 8.40—News.
PARIS (PTT), Delannoy Concert by Odette Ertraud (Songs), Germaine Leroux (Pfte.), Soetens (Violin) and the Composer. 8.30—"Polyeucte"—Tragedy in Verse (Corneille) by the Odéon Players. **POSTE PARISIEN**, Records. 8.7—Paul Reboux. 8.20—Records. **PRAGUE**, "The Tragedy of Man" (contd.).
RADIO-NORMANDIE, Concert. 8.20—Light Music. 8.40—Variety. **RADIO-PARIS**, Renie Harp Sextet. 8.30—Press Review. 8.45—Concert. Ortambert Quartet, Mme. Doniau-Blanc (Songs), Yvonne Save (Recitations), Lily Laskine (Harp). **ROME** and **TURIN**, Sacred Music. Part I. Viganelli (Organ) (Bach, Bossi, Vierne). Part II. Requiem (Perosi).
STOCKHOLM, Discussion (contd.). 8.15—Ture Rangström Manuscript Songs by Set Svanholm, the Composer accompanying. 8.45—News. **STRASBOURG**, News (German). 8.10—Records. 8.30—Chamber Music (Corelli, Bach, Dvořák). **STUTTGART**, See Hamburg. 8.10—All Souls' Day Concert. Soloists, Choir and Orchestra. Conductor: Steffen.
TOULOUSE, 8.10—Bal champêtre. 8.25—Jazz, Cigány Band. 8.55—News.
VIENNA, Requiem (Mozart) (contd.). 8.10—Songs (Wolf) by Erika Rokyta (Soprano) and Duhan (Baritone).
WARSAW, Topical. 8.5—Records: Sacred Music. 8.55—Pfte. (Bach-Tausig, Beethoven, Chopin).

9 p.m.

ATHLONE, String Orchestra. 9.30—Variety.
BERLIN, News. 9.15—Listen to this! 9.30—Records. **BEROMÜNSTER**, 9.5—News. **BRESLAU**, **FRANKFURT**, News. 9.30—Serenade. Gleiwitz-Beuthen Orchestra and the Beuthen Chamber Music Society. **BRUSSELS (1)**, Records. 9.15—"Kaatje"—Opera (contd.). **BRUSSELS (2)**, Light Orchestral. **BUCHAREST** and **RADIO-ROMANIA**, News (French, German, Romanian). **BUDAPEST (1)**, Records.
COLOGNE, Time; News. 9.25—"The Rombergs—a Family of Musicians"—Sequence (Freiberger).
DEUTSCHLANDSENDER, News. 9.30—Pfte.: Suite pintoresco (Turina).
EIFFEL TOWER, Orchestra and Choir (contd.).
HAMBURG, News. 9.30—Excerpts from the Première of "Eulenspiegel"—Opera (Stieber) from the Hanover Opera (Recorded). **HILVERSUM (1,875 m.)**, Orchestra (contd.); at 9.40—News. **HILVERSUM (301.5 m.)**, Flemish Humour. 9.10—A.V.R.O. Orchestra. Conductor, Treep.
KALUNDBORG, French Pastorales (arr. Weckerlin) by Hilmar Biehe (tenor). 9.15—News. 9.30—Contemporary Music (Hindemith, Weill, Bartok). **KÖNIGSBERG**, News. 9.20—Talk. 9.40—Orchestra from Breslau.
LEIPZIG, Symphony (Bruckner) (contd.). 9.10—News. 9.30—See Breslau. **LILLE**, Orchestra, Songs (contd.).
MUNICH, Time; News. 9.20—Chess. 9.50—Hof Theatre Orchestra.
OSLO, Talk. 9.15—Light Orchestral.
PARIS (PTT), "Polyeucte" (Corneille) (contd.). **POSTE PARISIEN**, Fauré Music. Quintet and Panzera (Baritone). **PRAGUE**, News. 9.15—Records. 9.40—German News.
RADIO-NORMANDIE, Classical Music. **RADIO-PARIS**, Concert (contd.). **ROME** and **TURIN**, Sacred Music (contd.).
SOTTENS, 9.5—League of Nations Report. **STOCKHOLM**, Records. **STRASBOURG**, Chamber Music (contd.). 9.30—French Music by Kuntz (Organ). **STUTTGART**, Time; News. 9.30—Classical Records.
TOULOUSE, Sketch. 9.45—Paris Programme.
VIENNA, Records of Alexander Moissi. 9.10—News. 9.20—Orchestra. Conductor: Schönherr.
WARSAW, Pfte. (contd.). 9.25—Widomski (Organ).

10 p.m.

ATHLONE, Variety. 10.30—News; Light Music.
BRESLAU and **MOST GERMAN STATIONS**, Concert (contd.). **BRUSSELS (1)**, News; Mozart. Records. 10.20—"La boutique fantasque"—Ballet (Rossini-Respighi) from the Théâtre de la Monnaie. **BRUSSELS (2)**, News. 10.10—Records. **BUDAPEST (1)**, News (German).
DEUTSCHLANDSENDER, Variety Concert.
EIFFEL TOWER, Orchestra and Choir (contd.).
HAMBURG, "Eulenspiegel" (contd.). 10.20—Orchestra from Breslau. **HILVERSUM (1,875 m.)**, Orchestra (contd.). 10.15—Records; Reading. **HILVERSUM (301.5 m.)**. A.V.R.O. Orchestra. 10.10—Records. 10.40—News. 10.50—Dance Band.
KALUNDBORG, 10.0-10.10—Contemporary Music (contd.).
LILLE, Orchestra, Songs (contd.). 10.30—News.
MUNICH, Hof Theatre Orchestra.
PARIS (PTT), "Polyeucte" (Corneille) (contd.). 10.30—News. **POSTE PARISIEN**, Records. **PRAGUE**, Prelude and Fugue in G minor (Bach) by Wiedermann (Organ).
RADIO-NORMANDIE, Classical Music. 10.30—Organ. **RADIO-PARIS**, Concert (contd.). 10.45—Orchestra. Conductor: Gaillard. **ROME** and **TURIN**, 10.0-10.15—News.
STRASBOURG, Organ (contd.). 10.30—News (French, German). **STUTTGART**, Classical Records.
TOULOUSE, Paris Programme. 10.15—Fantasy. 10.40—Operetta Airs.
VIENNA, Orchestra (contd.). 10.50—Notes.
WARSAW, Records.

11 p.m.

BUDAPEST (1), 11.5—News.
FRANKFURT and **STUTTGART**, Concert (Recorded). Part I, Handel. Part II, German Romantic Music. Part III, Italian Music. Part IV, Wagner.
HILVERSUM (1,875 m.), Reading. **HILVERSUM (301.5 m.)**, Dance Band. 11.10—Palla (Organ).
RADIO-NORMANDIE, Organ. 11.30—Light Music. **RADIO-PARIS**, Orchestra (contd.).
TOULOUSE, Light Music. 11.55—News.

12 midnight

BEROMÜNSTER and **MONTE CENERI**, Repetition of the 8 p.m. Transmission.
FRANKFURT and **STUTTGART**, Concert (contd.).
RADIO-NORMANDIE, Light Music. 12.30—Dance Music. **RADIO-PARIS**, Orchestra (contd.).
TOULOUSE, 12.5—Light and Dance Music.

PRINCIPAL EVENTS

SYMPHONY CONCERTS
6.30 Radio-Paris: Schubert, Ravel, etc.
7.5 Beromünster: Conductor, Schoeck.
7.10 Berlin: Conductor, Carl Schuricht.
7.10 Budapest 1: Schubert's Unfinished, etc.
7.10 Vienna: Requiem (Mozart).
7.30 Regional: Conductor, Kabasta.
8.0 Italian stations: Sacred concert.
8.10 Leipzig: Bruckner's Seventh.
8.45 Eiffel Tower: Liszt, Debussy.

LIGHT CONCERTS
1.0 Radio-Paris: Grieg and French music.
1.50 Kalundborg: Light classics.
4.55 Stockholm: Scandinavian music.
5.0 Brussels 2: Conductor, Paul Douliez.
7.0 Kalundborg: Folk songs.
7.50 Hilversum (1,875 m.): Arnhem Orch.
8.0 Swiss stations: Swiss music.
9.10 Hilversum (301.5 m.): Conductor, Nico Treep.
9.15 Oslo: Bergen Orchestra.
9.30 Breslau, etc.: Serenade.
9.30 Kalundborg: Modern music.
10.45 Radio-Paris: Popular orchestral.

OPERA, BALLET
8.0 Brussels 1: "Kaatje" (Buffin).
10.20 Brussels 1: "La boutique fantasque."

CHAMBER MUSIC
5.0 Brussels 1: The Zimmer Quartet, pfte.
8.0 Paris (PTT): Delannoy programme.
8.10 Hamburg: Brahms programme.
9.0 Poste-Parisien: Fauré programme.

RECITALS
12.15 Radio-Paris: Mme. Bracquemond (organ).
6.40 Hilversum (301.5 m.): Lili Krauss, Goldberg (pfte., violin).
8.0 Radio-Paris: Harp sextet.
8.5 Bucharest: Romanian songs.
8.10 Stuttgart: All Souls Day music.
8.10 Vienna, Athlone: New Wolf songs.
8.15 Stockholm: New Swedish songs.
11.10 Hilversum (301.5 m.): Palla (organ).

PLAYS
7.0 Prague: "The Tragedy of Man."
8.30 Paris (PTT): "Polyeucte" (Corneille).
9.35 National: The St. Hilary Players.

LAST NEWS BULLETINS (subject to slight alterations)
7.45 Warsaw; 8.30, Radio-Paris; 8.40, Oslo; 8.45, Stockholm; 9.0, German Stations, Prague, Vienna; 9.5, Beromünster; 9.45, Bucharest; 10.0, Brussels, Italian Stations; 10.30, Athlone, Paris (PTT); 11.5, Budapest 1.

DANCE MUSIC
6.10 Hilversum (301.5 m.); 10.25, Regional; 10.50, Hilversum (301.5 m.), 12.30, Radio-Normandie.

MISCELLANEOUS
11.15 National: Municipal Election results.

NATIONAL

Time Signals: (normally) Big Ben, 10.15 a.m., 5.15 p.m., 12 midnight. Greenwich, 10.30 a.m., 2.0, 6.0, 9.0, 11.30 p.m.

10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—Cinema Organ (Reginald Porter-Brown).
11.15—Gramophone Records.
11.30—For the Schools: German.
11.45—Gramophone Records.
12.0 noon—Bible Talks by the Very Rev. C. A. Alington, D.D.
12.25 p.m.—BBC Northern Ireland Orchestra; James Johnston (Tenor).
1.15—Organ Recital (Maurice Vinden).
2.0 (ex. Scottish)—Herring Bulletin.
2.0-4.0 (Scottish)—See Regional.
2.5 (ex. Scottish)—For the Schools: Gardening. 2.30—Music.
3.0 (ex. Scottish)—Liszt Records.
3.35 (ex. Scottish)—For the Schools; Early Stages in German.
4.0—Frederick Grinke (Violin), Dorothy Manley (Pfte.).
4.30—Gramophone Records.
5.0—Talk: Lives of English Animals.
5.15—The Frank Walker Octet; Percy Manchester (Tenor).
6.0—The First News.
6.20—For Farmers—Anthony Hurd.
6.40—BBC Orchestra. Conducted by Arnold Perry; Oda Slobodskaya (Soprano). Overture, The Barber of Bagdad (Cornelius); O Hall of Song, Tannhäuser (Wagner); Minuet and Waltz, Pierrette's Veil (Dohnányi); Ozean, du Ungeheuer, Oberon (Weber); Overture, Euryanthe (Weber).
7.20—Entertainment Parade, introduced by Henry Kendall with the BBC Variety Orchestra.
8.0—Talk.
8.30—Marietta and Martha Amstad (Sopranos).
9.0—The Third News.
9.20—World Affairs (from New York).
9.35—The St. Hilary Players in "The Eve of All Souls"—A Miracle Play.
10.35—Winifred Small, Jean Pougnet (violins).
11.15—Results of Provincial Municipal Elections.
11.30—Dance Records.
12.0—Election Results, continued.

REGIONAL

Time Signals: (normally) Big Ben, 10.15 a.m., 5.15 p.m., 12 midnight. Greenwich, 10.30 a.m., 2.0, 7.0, 10.0, 11.30 p.m.

10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—The BBC Scottish Orchestra, Evelyn Hewan (Mezzo-Soprano).
11.45—Haydn Heard and his Band.
12.45 p.m.—Reading.
1.0—New Gramophone Records.
1.45 (ex. Scottish)—Arthur Salisbury and His Orchestra.
1.45 (Scottish)—Gramophone Records.
2.0 (Scottish)—For the Schools: 2.5—Junior Geography. 2.30—English.
2.35 (ex. Scottish, Western and Northern till 3.0)—BBC Midland Orchestra; Astley Fulford (Baritone).
2.50 (Scottish)—Iain Garrioch Ross (Tenor), Fergus J. McLellan (Bass-Baritone).
3.0 (Western, Northern) — For the Schools.
3.20 (Scottish)—For Unemployed.
3.35 (ex. Scottish.) Song Recitals.
3.35 (Scottish)—For the Schools: Early Stages in German.
4.0—Cinema Organ.
4.30—Orchestra.
5.15—The Children's Hour.
6.0 (Regional, N. Ireland)—BBC Dance Orchestra.
6.0 (Midland)—Jack Padbury's Band.
6.0 (Western)—Organ Recital by Charles Clements.
6.0 (Northern)—The Salts (Saltaire) Band; George Sylvester (Baritone).
6.0 (Scottish)—James Buyers (Violin).
6.15 (Scottish)—For Young Scots.
6.30 (Midland)—Cinema Organ.
6.30 (Western)—Welsh Orchestra.
6.35 (Scottish)—Scottish Dances.
6.40 (Northern)—London Log.
7.0—The Second News.
7.20—Regional Announcements.
7.30 (ex. Western, Northern) — The Vienna Symphony Orchestra, conducted by Kabasta.
7.30 (Western)—Welsh Talk.
7.30 (Northern)—A Letter from a Gramophile, G. H. Dayne.
7.50 (Western)—The Plymouth Orpheus Society, Gladys White (Pfte.).
8.0 (Northern)—Organ — Reginald Dixon.
8.30 (ex. N. Ireland)—George Graves in "Princess Caprice."
8.30 (N. Ireland)—Records.
9.20 (N. Ireland)—Talk.
9.45 (ex. Western, Scottish)—Schubert —2. George Parker (Baritone).
9.45 (Western)—Talk.
9.45 (Scottish)—Reading.
10.0—News Summary.
10.25—Dance Band.
11.30—Late News Summary.
11.40—Records.

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).

1.30-2.30 p.m.—Time; Weather; Stocks; Records. 5.30—Children's Hour. 6.15—Around the Counties No. 3—Dublin and Kilkenny. Dublin: Maire Ni Earnain (Songs in Irish). Kilkenny: Michael O'Neill (Traditional Fiddle). 6.45—Weather; Stocks; News; Time. 7.0—Autobiography—Maire Ni Chinneidhe. 7.15—How Music differs from all other Arts—The Composer at Work—No. 1, by D. Ua Braoin with Station Orchestra. 7.55—New Varieties of Potatoes by W. D. Davidson, B.A., B.Sc.
8.10—See Vienna. 9.0—Station String Orchestra. 9.30—Variety. 10.30—What happened today; Light Music. 11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.); 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.10 a.m.—See Hamburg. 1.0 p.m.—News. 1.15—Light Orchestral. 2.0-2.30—Exchange; Markets.
3.30—Reich Hitler Youth Music Festival—Orchestra from Brunswick Theatre. Conductors: Abendroth and Maasz (Recorded).
4.10—Robert Franz Songs by Margarete Roll (Soprano) and Ecklebe Songs by Johannes Maximilian (Baritone), accompanied by the Composer. 4.35—Books. 5.0—Records: Operetta Music; Marches. 6.0—Reading.
6.15—Gerda Nette (Pfte.). Sonata in D (Haydn). Prelude and Fugue in G minor (Bach-Liszt).
6.45—Evening Echoes. 7.0—News.
7.10—Station Orchestra. Conductor: Schuricht. Gisela Binz (Pfte.). Ninth Symphony (Fleischer). Minuet and Finale in C (Haydn). Symphonic Variations for Pfte. and Orchestra (Franck). Fifth Symphony in C minor (Beethoven).
9.0—News. 9.15—Listen to this!
9.30—Records.
10.0-11.0—Orchestra from Breslau.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).

5.30 a.m.—Ski-ing Lesson.
11.0-12.45 p.m.—See Sottens; at 11.30: News.
3.0—Light Music by the Zürich Radio Orchestra. Conductor: Hoffmann. 3.29—Time. 3.30 (from Basle)—Italian Songs by Armin Weltner (Baritone). 4.0—Chamber Music. 4.50—Music. 5.0—For Children. 5.30—Music. 5.40—Talk: Maxim Gorki. 6.0—Time; Music. 6.30—News. 6.45—Religious Address: Suffering.
7.5—"Tonhalle" Society Concert from Zürich. Tonhalle Orchestra. Conductor: Othmar Schoeck. Marcel Saillet (Oboe). 7.45—Talk by K. Schmid-Bloss: Stage Careers.
8.0 (from Basle)—For Swiss Nationals Abroad. Part I: Hans Huber Commemoration. Part II: Folk Songs of Italian Switzerland. Part III: Programme with Jaques-Dalcroze. 9.5—News. 9.15—Weather.
12.0 m't-1.5 a.m. (Tuesday)—Repetition of the 8.0 p.m. Transmission.

BRESLAU (Germany)

950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).
Transmits at intervals from 4.0 a.m.
11.0 a.m.—Orchestra; at 12.0 noon—News. 1.0 p.m.—News.
1.15—Variety from Deutschlandsender. 2.0—Markets. 3.0—Books.
3.20—Robert Franz Songs. 3.40—Talk: Upper Silesia. 4.0 (from Gleiwitz)—DLV Band. In the interval: Report: East Germany's largest Goods Station. 5.50—Announcements. 6.0 (from Gleiwitz)—Dialect Play. 6.45—Topical. 7.0—News. 7.10—"The Autumn Law-suit"—Burlesque (Albrecht); Music by Sattler. 9.0—News.
9.30-11.0—Serenade from the Gemeindehaus, Beuthen. Gleiwitz-Beuthen Orchestra. Conductor: Scherzer; the Beuthen Chamber Music Society. Homage March (Grieg). Overture, Oberon (Weber). Suite, Mozartiana (Tchaikovsky). Quartet: Romantische Abendmusik (Dombrowski). Rhapsody (Liszt). Two Lyric Pieces (Grieg). Selection, "The Dubarry" (Millöcker).

BRNO (Czechoslovakia)

922 kc/s (325.4 m.); 32 kW.
Transmits at intervals from 5.15 a.m.
5.45-10.10 p.m.—See Prague.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.); 15 kW.
6.37-9.0 a.m.—Records; News; Gym.
12.0 noon—Classical Records. 12.30 p.m.—Radio Orchestra. Conductor: Douliez. Magnée (Flute); Béthume (Violin). 1.0—News. 1.10—Light Orchestral. 1.30—Classical Records.
2.0—Art Notes. 4.55—News.
5.0—Chamber Music by the Zimmer Quartet and Vantomme (Pfte.). Quintet (d'Agrèves). Italian Serenade (Wolf). Quartet in B flat (Haydn).
6.0—Talk: Belgian Maritime Activities. 6.15—Classical Records.
6.45—Maurice de Groote (Songs). Songs to Heine Poems (Ropartz). Fêtes galantes (Debussy). L'horizon chimerique (Fauré).
7.15—Reviews: (a) The Cinema, (b) The Colonies, (c) Science. 7.30—News.
7.10—Talk. 7.15—Doric Quartet (Respighi) by the "Amis de la musique" Quartet. 8.0—Books. 8.5—Stroescu (Romanian Songs). 8.30—News; Sports. 8.45—Dinicu Orchestra. 9.0—News (French, German, Romanian).

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.); 120 kW.
8.30 a.m.—News. 9.0—Requiem Mass from the Coronation Church. 11.0—Chimes. 11.15—Symphony Orchestra. 12.30 p.m.—News. 3.15—For Students. 4.0—Talk. 4.30—Homeros Blind Choir. 5.30—Economics. 5.55—Wehner (Organ) from the Academy of Music. 6.45—Poems.
7.10—Opera Orchestra. Conductor: Rajter. Prelude, Aria and Fugue (Bach-Siklos). Tragic Overture (Brahms). Excerpt, Tasso (Liszt). Trauerstimmen (Mossanyi). Unfinished Symphony in B minor (Schubert).
8.30—News. 8.55—Records. 10.0—News in German. 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.); 18 kW.
4.30 p.m.—Talk: Canada. 5.15—Records. 6.0—German Lesson. 7.10—Art Talk: Goya. 7.40—News.

Oswald Kabasta, conductor of the Vienna Symphony Orchestra (Regional, 7.30 p.m.)

8.0—"Kaatje"—Four-Act Opera (Buffin), from the Théâtre de la Monnaie. Conductor: Corneil de Thoran. In the interval at 8.55-9.15: Records: Songs without Words (Mendelssohn). 10.0—News; Pfte. Fantasia in C minor (Mozart), by Fischer (Records). 10.20-11.0—"La Boutique Fantasque"—Ballet (Rossini-Respighi), from the Théâtre de la Monnaie.

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.
6.37-9.0 a.m.—Records; News; Gym.
12.0 noon—Mozart Records. 12.30 p.m.—Italian Light Music. 1.0—News. 1.10—Light Orchestral. 1.30—Respighi and Wagner Records. 2.0—Shipping.
4.55—News.
5.0—Light Orchestral. Conductor: Douliez. 5.45—For Children.
6.30—Records: Le festin de l'araignée (Roussel). 6.45—Flemish Programme for Ex-Servicemen. Van Daele reads.
7.0—Schubert Records. Movements, The Unfinished Symphony. Overture, "Die Zwillingsbrüder."
7.30—Talk. 8.0—For Ex-Servicemen.
8.5—Light Orchestral Music. Ferari (Violin); Segers (Accordion): Gilman (Flute). Wedding March, Francia (Paradis). Overture, "Raymond" (Thomas). Waltz (Strauss). Selection, "Cocorico" (Ganne). Rêverie (Vieuxtemps). Potpourri (Salabert). Festival Overture (Suppé). Fiançailles (Wesly). Selection, "Faust" (Gounod). Accordion: Tango and Waltz (Segers). Overture, "Chal Romano" (Ketelbey). Echos de la forêt (Damaré). Très jolie (Waldteufel). Feu d'artifice (Demaele). 10.0—News.
10.10-12.0 m't—Records.

BUCHAREST (Romania)

823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov), 160 kc/s (1,875 m.).
Transmits at intervals from 4.30 a.m.
4.0 p.m.—Radio Orchestra. Conductor: Nottara; at 5.0—Time; Weather; Topical Talk.
5.55—Educational Programme. 6.15—Records of Famous Singers of Today.
6.50—French Songs by Viorica Angnel.

COLOGNE (Germany)

658 kc/s (455.9 m.); 100 kW.
Transmits at intervals from 5 a.m.
11.0 a.m.—Band. 12.0 noon—News.
12.15 p.m.—Orchestra from Hamburg.
1.0—News. 1.15—Schrammel Ensemble. 1.45—Markets. 2.0—For Children. 2.45—Markets. 3.0—Legends, Songs and Anecdotes. 4.0—Classical Records. 4.40—Johannes Kirschweng reads.
5.0—See Stuttgart.
6.45—Theatre Notes. 7.0—News.
7.10—Weekly Review.
8.10—Prisca Quartet and Grape (Pfte.). Andante (Schubert). Impromptu in C minor (Schubert). Adagio (Schumann). Novelette in F (Schumann). Romance (Grieg). Nattstykke (Grieg). Theme and Variations (Straesser). 9.0—Time; News.
9.25—"The Rombergs—a Family of Musicians"—Sequence (Freiberger), with Kläre Hansen (Soprano), Schmidt ('Cello) and Grape (Pfte.).
10.0-11.0—Orchestra from Breslau.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.); 60 kW.
Transmits at intervals from 5.0 a.m.
11.0—See Breslau.
12.45 p.m.—News.
1.0—Variety. 2.0—Announcements.
2.15—Records. 2.45—Talk: Robinson Island. 3.0—Light Orchestral; at 4.0-4.10—Everyday Experiences.
5.0—Books. 5.20—Suite (Ries) by Isabella Schmitz (Violin) and Laugs (Pfte.). 5.40—A Visit to the Reich Institute of Interpreters. 6.0—Old and New Operetta Music. Records; Hannele Frank (Songs); Ludwig Schmidseder (Pfte.). 6.45—Topical.
7.0—Motto; News.
7.10—See Hamburg.
8.10—See Frankfurt.
9.0—News. 9.30—Suite pintoresco (Turina) by Hilde Knopf-Liesendahl (Pfte.). 9.45—Weather.
10.0-11.0—Variety Concert. Gotronzy Band, the Five Belcantos, Litkiewicz and Stenzel (Pftes.).

FRANKFURT (Germany)

1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg, and Trier, 1,195 kc/s (251 m.).

MONDAY (November 2)

Transmits at intervals from 5.0 a.m.
11.10 a.m.—See Hamburg. 1.0 p.m.—News. 1.10—All Souls Day—Records.
2.0—Talk; Markets. 2.15—For Children. 2.45—Light Orchestral.
3.45—Reading. 4.0—Two Pftes.
4.30—Talks.
5.0—See Stuttgart.
6.0 (from Coblenz)—Folk Music by the Braubach Accordion Club and the Runkel-Helm Schrammel Duo. 6.40—Topical. 6.55—Announcements.
7.0—News.
7.10—See Hamburg. 8.10 (from Cassel)—Marches and Sailors' Songs by a Band. 9.0—Time; News.
9.30—See Breslau.
11.0 p.m.-1.0 a.m. (Tuesday)—Concert (Recorded). Station Orchestra. Conductor: Rosbaud. Gertrud Rünger (Songs) and Töttcher (Oboe). Part I. Handel. Part II. German Romantic Music. Part III. Italian Music. Part IV. Wagner.

HAMBURG (Germany)

904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg and Stettin, 1,330 kc/s (225.6 m.).
Transmits at intervals from 5.15 a.m.
11.10 a.m.—Symphony Orchestra from Hanover Castle. Conductor: von Sosen; at 12.0 noon—News. 1.0 p.m.—News. 1.20—Light Music.
2.0—Exchange. 2.15—Shipping. 2.30—Erna Kroll Lange and Eva Schlee (Sopranos) and Stadelmeier (Tenor).
3.0—See Deutschlandsender. 4.0—Dialect Programme with Songs by Jakschtat (Bass-Baritone). 4.45—Talk: The Law Courts. 5.0—Records. 5.45—Shipping; Weather. 6.0 (from Kiel)—Marine Band.
6.45—See Munich. 7.0—News.
7.10—"The von Spee Squadron"—an Epic of the Great War.
8.10—"Johannes Brahms and Klaus Groth"—Sequence. Station Choir. Conductor: Gregor. Aida Montes (Soprano), Emmy Wichmann (Contralto) and Others. An Imaginary Conversation at Thun, Summer of 1889 (Kulenkampff). Nine Brahms Songs to Groth Text. Last Movement from the Violin Sonata in G.
9.0—News.
9.30—Excerpts from the Première of "Eulenspiegel"—Opera (Stieber) from Hanover Opera. Conductor: Krasselt (Recorded).
10.20-11.0—Orchestra from Breslau.

HILVERSUM (1,875 m.) (Holland)

160 kc/s; 10 kW until 2.40 p.m.; 100 kW from 2.40 p.m.
N.C.R.V. Programme.
7.40-9.10 a.m.—Bible Reading; Meditation; Records. 10.10—Service.
10.40—Reading. 11.10—Records.
11.40—Announcements; Records.
12.10 p.m.—Stichtsch Salon Orchestra.
1.40—For Schools. 2.15—Records.
2.40—Cookery Hints. 3.10-3.25—Records. 3.40—Bible Reading.
4.40—Parker (Organ). 5.40—Records.
6.10—Letter-box. 6.40—Announcements; Letter-box; Report. 7.40—News.
7.50—Arnhem Orchestra. Conductor: Spaanderman. Juda (Violin); at 8.45: Talk, and at 9.40: News.
10.15-11.10—Records; Bible Reading.

HILVERSUM (301.5 m.) (Holland)

995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
A.V.R.O. Programme.
7.40 a.m.—Time; Records. 9.40—Time; Service. 9.55—Records.
10.10—The Hague Quartet. In the interval: Kramer (Recitations). 11.40—Jetty Cantor Orchestra and Records.
1.10 p.m.—A.V.R.O. Orchestra. Conductor: Treep, and Records.
2.45—Records.
3.45—Frieda de Vos (Pfte.).
4.10—Lecture-Recital by Max Tak, with Records: "Tosca" (Puccini).
5.10—Light Music by "The Palladians."
6.10—A.V.R.O. Dance Band.
6.40—Lili Krauss (Pfte.), Goldberg (Violin). 7.25—Talk. 7.40—News.
7.50—Records.
8.40—"Flemish Humour"—Julia de Gruyter and Rien van Noppen. 9.10—A.V.R.O. Orchestra. Conductor: Treep. 10.10—Records. 10.40—News.
10.50—A.V.R.O. Dance Band.
11.10-11.40—Palla (Organ).

KALUNDBORG (Denmark)

240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).
Transmits at intervals from 6.0 a.m.
11.0 a.m.-1.0 p.m.—Bendix String

MONDAY (November 2)

Ensemble. 1.50—Classical Music. Radio Orchestra. Conductor: Grøndahl; at 2.35—Talk, and at 2.45—Reading. 3.50—Announcements. 3.56—Poem. 4.0—Talk: Modern Art. 4.40—Exchange; Markets. 4.50—Records. 5.0—Chimes. 5.1—Monologues with Pfte. 5.15—Weather. 5.35—English Lesson. 6.0—News. 6.30—Talk: Liberalism and Economic Planning. 7.0—Chimes.
7.1—Folk Songs by the Oluf Ring Choir, with Commentary.
7.30—"L'Avare"—Five-Act Play (Molière).
9.0—French Pastorales (arr. Weckerlin) by Hilmar Biehe (Tenor). Au bord de la fontaine. Ronde villageoise. L'aimable Flore. Que fais-tu bergère? Les quinze ans de Rosette. Bergère legère. L'amour s'envole. 9.15—News.
9.30-10.10—Contemporary Music by the Radio Orchestra. Conductor: Tuxen. Overture, "Neues vom Tage" (Hindemith). Suite (Weill). Hungarian Folk Melodies (Béla Bartók).

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)

1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).
Transmits at intervals from 5.0 a.m.
11.10 a.m.—See Hamburg. 1.0 p.m.—News. 1.10—Talk. 1.25—Records. 2.10—Books. 2.25—Talk. 2.35—Talk: Danzig Suburbs. 3.0—Reading. 3.20—Börschel Band, Else Marr and Fredy Dackweiler. 4.50—Books.
5.0—See Stuttgart.
5.50—Announcements. 6.0—"Living my own Life"—Sequence. 6.25—Talk: Animals. 6.45—Topical.
7.0—News.
7.10—See Hamburg.
8.10—Austrian Chamber Music and Songs by the Ninke Ensemble and others. 9.0—News. 9.20—Talk: The Diet of Augsburg, 1555.
9.40-11.0—Orchestra from Breslau.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
Transmits at intervals from 5.0 a.m.
11.10 a.m.—See Hamburg. 1.0 p.m.—News; Exchange.
1.15—Variety from Deutschlandsender.
2.0—For Women. 2.15—Art Review. 3.0—Records. 4.0—Weather; Markets. 4.10—Talk: Merseburg. 4.30—Music. 4.40—Reading. 5.0—Light Orchestral.
5.40—Report: The School of Journalism at Leipzig University. 6.0—Military Band. 6.50—Wireless Press Review. 7.0—News.
7.10—See Hamburg.
8.10—Seventh Symphony in E (Bruckner) from the Gewandhaus. Leipzig Symphony Orchestra. Conductor: Weisbach. 9.10—News.
9.30-11.0—See Breslau.

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
8.0 p.m.—Time; Pfte. Sonata in D minor (Chopin) by Cortot (Records).
8.15—Literary Talk.
8.30—Station Orchestra and Singers. Conductor: Soret. 10.30—News.

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.); 15 kW.
Transmits at intervals from 11.0 a.m.
8.0-9.5 p.m.—See Beromünster.
12.0 m't-1.5 a.m. (Tuesday)—See Beromünster.

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral. 12.45 p.m.—News; Exchange.
1.0-2.0—See Deutschlandsender. 3.0—Weather; Markets. 3.10—Talk. 3.30—Schubert and Haydn Music by Trude Wildberg (Soprano) and Bohnen (Pfte.). 4.0—Records. 4.30—Books.
4.50—Weather; Markets. 5.0 (from Nürnberg)—"The Silent Forests"—Musical Sequence. Orchestra. Conductor: Böhm.
6.0—"My Friend, the Minister of State"—Play (Humbach) with the Station Schrammel Ensemble. 6.45—Talk: Germany's Recovery. 7.0—News.
7.10—See Hamburg.
8.10—Opera Aria Records. 9.0—Time; News. 9.20 (from Nürnberg)—Chess.
9.50-11.0 (from Bayreuth)—Hof Theatre Orchestra. Conductor: Jessen. Overture, "The Barber of Seville" (Rossini). Waltz, "Der Rosenkavalier" (Strauss). Selection, "The Pearl Fishers" (Bizet). Wo die Zitronen blüh'n (Strauss). Selection, "Der Obersteiger" (Zeller). Marches (Urbach, Fučik).

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trøndelag, 629 kc/s (476.9 m.).
Transmits at intervals from 10.40 a.m.
6.30 p.m.—Time; "Aunt Tramer's Will"—Farce in Four Acts (Höyer).
8.10—Foreign Affairs. 8.40—News.
9.0—Topical.
9.15-10.0—Bergen Radio Orchestra. Negro March (Filipucci). Ich liebe dich (Grieg). Erotika (Grieg). Dance (Helmund). Trost (Lincke). Minuet (Danning). Serenata (Toselli). Sjögren Potpourri (Skjöld) Two Pieces (Olsen). Melody (Rubinstein).

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
6.45 p.m.—Theatre Talk. 7.0—News.
7.10—Racing. 7.20—Foreign Affairs.
7.45—Press Review. 7.55—Home Affairs. 8.30—Literary Talk: Jean Giono.
8.45—Station Orchestra and Raugel Choir. Conductor: Clergue. Maria Brenèze, Verroust and Lovano (Songs), Doyen (Pfte.). Part I: Liszt. Der nächtliche Zug. The Beatitudes, from "Christus." Dance of Death. Part II: Prières (Caplet). Ballad (Fauré). La Demoiselle élue (Debussy).

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
Transmits at intervals from 7.10 a.m.
12.0 noon—Exchange. 12.5 p.m.—Records. 12.35—Exchange.
12.39—Records: Brandenburg Concerto in D (Bach).
1.19—Chopin Records of Brailowsky (Pfte.). Nocturne in E flat. Waltz in A flat. Etudes and Waltz.
1.35—Records: Suite in D (Bach).
2.0, 3.45, 4.35—Exchange. 6.0—Call.
6.2—Mozart Records. Overture, "The Magic Flute." Sonata in C. Aria, "Figaro."
6.30—Exchange. 6.35—Topical. 6.55—Song Records. 7.6—News. 7.25—For Gardeners. 7.32—Amusements.
7.37—Records: Rachmaninov, Glazunov, Rimsky-Korsakov.
7.52—Books. 7.57—Records: L'Apprenti sorcier (Dukas). 8.7—Paul Reboux.
8.20—Records.
9.0—Fauré Concert. Quintet and Panzera (Baritone). Talk. Pfte. Quintet Songs: (a) En sourdine, (b) Le Parfum impérissable, (c) Soir.
10.0—Wagner Records: Duet, "Tristan and Isolde." Excerpts, "Siegfried."
10.30-11.0—Records.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m.
4.0 p.m.—Bach and Tournemire Music by Mulet (Organ) from the Schola Cantorum. 4.30—The Père-Lachaise Cemetery—a Radio Pilgrimage, with Music and Poems.
5.0—Pasdeloup Concert Orchestra. Conductor: Cloëz. Two Preludes and Fugue (Bach). Chaconne, "Orpheus" (Gluck).
5.30—For Gardeners. 5.37—Records. 5.45—Art Review. 5.52—Talk.
6.0—Orchestra (contd.); Lucienne Royer (Violin). Sarabande (Bach). Funeral March (Schumann). Funeral March (Grieg). Violin: (a) Sicilienne (Paradis), (b) Hymn to the Sun (Rimsky-Korsakov), (c) Andante (Fauré).
6.30—News; Reviews. 7.20—Radio Press Review.
7.38—Pasdeloup Concert Orchestra. Conductor: Cloëz. Excerpt, "Romeo and Juliet" (Gounod). Andante (Mendelssohn). Prelude, "Lohengrin" (Wagner). Valse triste (Sibelius).
8.0—Marcel Delannoy Concert by Odette Ertraud (Songs), Germaine Leroux (Pfte.), Soetens (Violin) and the Composer.
8.30—"Polyeucte"—Five-Act Tragedy in Verse (Corneille), by the Odéon Players. 10.30—News.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
7.0 a.m.—Records. 7.15—News. 7.45—Gym. 8.0—Records. 11.0—Paris Symphony Orchestra. Conductor: Tomasi. 12.0 noon—For Kitchen Gardeners. 12.15 p.m.—Marthe Bracquemond (Organ). 12.45—News.
1.0—Grieg, French Music. Conductor: Tomasi. Lucy Nelbo (Songs). 2.0—Women's Journals. 2.10—Talk: Contemporary Novelists.
2.30—Berlioz Records.
3.0—Sonatas (Fesch, Loeillet, Hasse) by Koellreutter (Flute) and Thabe (Harpsichord and Pfte.). 3.30—"Death"—Poems. 3.50—Music Review by Wanda Landowska.
4.0—See Strasbourg.
5.0—Anniversaries. 5.10—Talk: Living Classics.
5.30—Pasdeloup Concert Orchestra. Conductor: Cloëz. Lucienne Royer (Violin). Overture, "Il re pastore" (Mozart). Adagietto (Bizet). Death of Asa, "Peer Gynt" (Grieg). Violin Concerto in A (Vivaldi). Waltz (Brahms). Complainte andalouse (Espajo).
6.0—Art Review and Talks.
6.30—Orchestra (contd.). March "Alceste" (Gluck). Tragic Symphony (Schubert). Berceuse (Fauré). Excerpts, "Mother Goose" (Ravel). Song, "Shylock" (Fauré.)
7.30—Books. 7.50—Talk.
8.0—Renie Harp Sextet. Contemplation (Renie). Les révérences nuptiales (Boismortier). Slav Dances (Dvořák). Melody (Nin). Les jeux d'eau à la Villa d'Este (Liszt). March of the Tin Soldiers (Pierné). 8.30—Press Review.
8.45—Concert—Ortambert Quartet, Mme. Doniau-Blanc (Songs), Yvonne Save (Recitations), Lily Laskine (Harp). Quartet in A (Schumann). Songs. Recitations. Andante and Scherzo (Florent Schmitt). Songs. Recitations. Dances (Debussy).
10.45 p.m.-12.15 a.m. (Tuesday)—Orchestra. Conductor: Gaillard. Overture, "Patrie" (Bizet). Suite, "Izeyl" (Pierné). Sérénade mélancolique (Tchaikovsky). Enterrement d'Ophélie (Bourgault-Ducoudray). Excerpt, "Rédemption" (César Franck). Pavane (Fauré). Suite in B minor (Bach). Cortège nocturne (Lazzari).

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.); 120 kW.
Transmits at intervals from 5.15 a.m.
2.0 p.m.—Prague Wind Quintet, Paz (Pfte.). Sonatina for Flute and Clarinet (Paz). Divertissement for Pfte. and Quintet (Roussel). Quintet (Rimsky-Korsakov).
2.40—Reading. 3.0—Exchange.
3.10—Concert from Bratislava.
4.10—Sketch. 4.25—Talk. 4.35—Love Song Cycle (Kálik). Kolarová (Soprano), Leichner (Violin) and the Composer (Pfte.). 5.0—Records. 5.10—German Transmission. Talk: "Eternal Light"—An Anthology.
5.45—News (German). 5.55—Record. 6.0—News. 6.10—Station Orchestra, Conductor: Ancerl. Orlando Barrera (Violin).
7.0—"The Tragedy of Man"—Play (Madách-Brábek-Verlicky), Music by Picka. 9.0—Time, News. 9.15—Records. 9.40—German News. 10.0-10.10—Prelude and Fugue in G minor (Bach) by Wiedermann (Organ).

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Band; at 7.10: News; at 8.0: Pfte. 8.30—Light Music. 8.45—Songs. 9.0—Classical Music. 9.15—Jack Savage and his Cowboys. 9.30—Light Music. 9.45—Songs. 10.0—Records. 10.15—Popular Music. 10.45—Opera Arias.
11.0—Classical Music. 12.0 noon—Organ. 12.40 p.m.—News.
1.0—Concert.
2.0—Records. 2.15—Chamber Music.
2.30—Records. 3.0—Orchestra. 3.30—Records. 4.0—Concert. 4.45—For Children. 5.0—Records. 5.15—Military Music. 5.30—Organ. 6.0—Children's Corner. 6.40—Talk; Racing. 7.0—Sports. 7.15—Concert; at 7.40: News. 8.20—Light Music.
8.40—Variety. 9.0—Classical Music.
10.30—Organ. 11.30—Light Music.
12.30-1.0 a.m. (Tuesday)—Dance Music.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2) and Turin (No. 2), 1,357 kc/s (221.1 m.).
7.30-7.50 a.m.—News.
9.30-10.30—See Turin. 11.45—News.
12.0 noon-12.10 p.m.—Announcements. 12.50—News. 1.0-1.5—Exchange. 1.15-2.0—News; Talk; Organ.
3.40—For Children. 4.0—News.
4.15—Sacred Music. 4.55—Poems.
5.50—Dopolavoro Notes. 6.0—Sports Notes and Talk (French). 6.20—News in Foreign Languages.
7.5—Time; News. 7.30—Government Notes.
7.40—The Bells of Rovereto.
8.0—Sacred Music. Part I. Ferruccio Viganelli (Organ). Two Chorals (Bach). L'heure mystique (Bossi). Meditation (Vierne). Part II. Requiem (Perosi). 10.0-10.15—News.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 10.0 a.m.
5.0 p.m.—Folk Music. 5.15—Concert.
5.40—Danov (Violin) and Alma Tadjer (Pfte.). 6.15—Popular Music.
6.40—Talk. 6.55—German Songs by Sya Voinikova (Soprano).
7.30—Excerpts, "Der Rosenkavalier" (Strauss). 7.45—News. 8.0-9.0—Light Music and Dance Music; at 8.30: Notes.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.—Trio for Violin, 'Cello and Pfte. (Mozart). 11.30—News. 11.40-12.45 p.m.—Light Music. Bob Engel Orchestra. 3.29—Time.
3.30-5.0—See Beromünster. 5.0 (from Geneva)—For Women. 5.15—Talk: Peace.
5.30-6.50—Programme from Geneva.
5.30—Esperanto Lesson. 5.35—Chess.
5.50—Music Lesson: Rhythm. 6.15—Radio Magazine. 6.50—News.
7.0 (from Geneva)—Sonata for Viola d'amore and Harpsichord (Rust).
7.15 (from Geneva)—Astronomical Talk: Castor. 7.35 (from Geneva)—Japanese Poems and Songs by Yosie Fujiwara (Tenor).
8.0—See Beromünster.
9.5-9.30 (from Geneva)—League of Nations Report.

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.); and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
4.5 p.m.—Lecture-Recital: Danish Folk Songs. 4.35—Reading.
4.55—Scandinavian Music. Norrköping Orchestra. Conductor: Freudenthal. Overture, "Elverhøj" (Kuhlau). Norwegian Rhapsody (Svendsen). Selection, "The Wedding at Ulfåsa" (Söderman). Preludio solenne (Jonsson). Three Gothland Dances (Aulin). Oriental Festival March (Nielsen).
5.50—Dialogue. 6.15—News. 6.30—Radio Dance Band. 7.15—Discussion: Sectarianism.
8.15—Ture Rangstrøm Songs by Set Svanholm, the Composer accompanying. Vältan. Kastaliskt. Orfeus. Tristans död. Syrsorna. Blåklint. Flickan från fjärran. Trumman. 8.45—News. 9.0-10.0—Records.

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
4.0 p.m.—Chamber Music. Pogoda (Pfte.). Octet (Svendsen). Pfte.: Croquis lorrains (Bretagne). Octet (Lazzari).
5.0—Records. 5.15—Film Talk.
5.30—Orchestra. Roskam ('Cello). Spanish Legends (Rust). Entr'acte, "La Colombe" (Gounod). Serenade (Caludi). Hymn to the Sun (Rimsky-Korsakov).
6.0—For Gardeners (in German).
6.15—Records: Petite suite (Debussy). 6.30—News; Reviews.
7.15—Franck and Fauré Records by Panzera (Baritone). 7.30—Time; News (French, German). 8.10—Records.
8.30—Chamber Music. Trio Sonata da chiesi (Corelli). Flute Sonata (Bach). Serenade (Dvořák).
9.30—Kuntz (Organ) from Obernai Church. Choral (Franck). Intermezzo (Widor). O Golgotha (Maleingreau). Funeral March and Song (Guilmant). Ite missa est (Erb).
10.30—News (French, German).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.10 a.m.—See Hamburg.
1.0-2.0 p.m.—See Deutschlandsender.
3.0—See Deutschlandsender. 4.45—Report: Technical Libraries. 5.0—Station Orchestra, Wendling Quartet and Singers. 6.45—Baden Echoes.
7.0—News.
7.10—See Hamburg.
8.10—All Souls' Day Concert. Station Soloists, Choir and Orchestra. Conductor: Steffen.
9.0—Time; News. 9.30—Classical Records.
11.0 p.m.-1.0 a.m. (Tuesday)—See Frankfurt.

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
8.10 p.m.—Bal Champêtre Orchestra.
8.25—Jazz. 8.40—Cigány Band. 8.55—News. 9.0—Sketch. 9.45—Paris Programme.
10.15—"Fleurs fanées"—Fantasy.
10.40—Operetta Airs. 11.0—Mexican Dance Band. 11.15—Chansonnettes.
11.40—Orchestra. 11.55—News. 12.5 a.m. (Tuesday)—Light Music. 12.20—Dance Music. 12.30—Announcements.

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
7.30-7.50 a.m.—News.
9.30-10.30—Requiem Mass from the Church of the Annunciation, Florence.
11.45—News. 12.50-1.0 p.m.—News.
1.0—Exchange.
3.40-4.55—See Rome. 5.50—Dopolavoro Notes. 6.0—News in Foreign Languages.
7.5-10.15—See Rome.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
Transmits at intervals from 6.0 a.m.
4.40 p.m.—Excerpts, Liturgy of the Dead, by the Vienna Seminary Schola Gregoriana. Conductor and Commentator: Dr. Franz Kosch.
5.10—Burgenland Programme. 5.35—English Lesson. 6.0—News.
6.15—"Voices of the Past"—Records of Famous Artists. 6.50—All Souls' Day in the Cistercian Monastery, Stams—Report.
7.10—Requiem (Mozart) by the "Hofmusikkapelle." Conductor: Grossmann.
8.10—Newly published Songs of Hugo Wolf—Erika Rokyta (Soprano) and Hans Duhan (Baritone). Ghasél. Nachruf. Abendbilder. Der Schwalben Heimkehr. Knabentod. Liebesfrühling. Gretchen vor dem Andachtsbild der Mater dolorosa. Herbstentschluss. Herbst. Frage nicht. Suschens Vogel. Die Tochter der Heide. Die Kleine.
9.0—Records of Moissi. 9.10—News.
9.20—Station Orchestra. Conductor: Schönherr. Overture, "Figaro" (Mozart). Andante in G (Haydn). Ein Schubert-Abend in Alt-Wien (Ralf). Elegy in C (Tchaikovsky). Dvořák Potpourri (Leopold). Clair de lune (Debussy). Selection, "Once upon a time" (Zelensky). Entr'acte, "Das Opfer" (Kolleritsch). Concert Overture (Scassola).
10.50-11.0—Announcements.

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.); Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
Transmits at intervals from 5.30 a.m.
11.3 a.m.—Light Music by the Rachoń Quartet. 11.40—Talk. 11.50-12.0 noon—News. 2.0 p.m.—Economics.
2.15—Records: Old Songs. 2.55—For Children.
3.15 (from Poznań)—"A Dialogue with Death"—Oratorio for All Souls' Day (arr. Markowski). Poznań Cathedral Choir. Conductor: Fr. Gieburowski. Nowowiejski (Organ) and Others. 4.15—Talk. 4.30—Wagner Records. 5.0—Topical. 5.10—Sports. 5.20—Announcements. 5.50—Talk.
6.0—Act III, "Les Noces"—Play (Wyspiański). 7.0—For Soldiers.
7.30 (from Poznań)—Marie Trampczynska (Contralto). Dignare o Domine (Handel). Lobet den Herrn (Beethoven). In questa tomba oscura (Beethoven). Litanei (Schubert). Le Jour des morts (Nowowiejski). On Wings of Song (Moniuszko).
7.50—News. 8.0—Topical. 8.5—Records: Sacred Music.
8.55—Sophie Rabcewicz (Pfte.). Toccata and Fugue in D minor (Bach-Tausig). Sonata in C sharp minor (Beethoven). Etude in C sharp minor (Chopin). Nocturne in C minor (Chopin).
9.25—Widomski (Organ) from the Warsaw Conservatoire. Passacaglia in D minor (Brachte-Linde). Prelude and Fugue on a Bach Theme (Liszt). Gothic Suite (Bochmann).
10.0—Records.

November 3 TUESDAY

4 p.m.

BERLIN, Variety. 4.30—Talk. **BUDAPEST (1)**, Report. 4.45—Hungarian Chamber Music.
COLOGNE, Books. 4.15—Operetta Records.
DEUTSCHLANDSENDER, Hungarian Music.
FRANKFURT, Light Orchestral. 4.30—Talk, Sketch.
HAMBURG, Books. 4.15—Variety. **HILVERSUM** (1,875 m.), Records, Recitations. 4.40—K.R.O. Chamber Orchestra. **HILVERSUM** (301.5 m.), 4.10—Children's Choir.
KÖNIGSBERG, 4.5—Ruth Franz Schöbel (Soprano). 4.25—Talks.
MUNICH, Unfamiliar Schubert Music. 4.45—Call of Youth. 4.50—For Farmers.
PARIS (PTT), Gourevitch (Pfte.). 4.15—Reading (Mark Twain). 4.30—Singing Lesson. **PRAGUE**, 4.30—Wandererleider (Mahler).
RADIO-NORMANDIE, Concert. 4.45—For Children. **RADIO-PARIS**, Records. **ROME**, News. 4.15—Violin Sonatas (Scarlatti, Bossi).
SOTTENS and **BEROMÜNSTER**, Horn. 4.30—Opera Music. **STOCKHOLM**, 4.30—Folk Music. 4.45—Records.
TURIN, News. 4.15—Dance Music. 4.55—For Women.
WARSAW, 4.15—Songs, Pfte. 4.50—Monologue.

5 p.m.

ATHLONE, 5.30—Children's Hour.
BEROMÜNSTER, Report. 5.25—Music. 5.30—Widmann Commemoration. **BRUSSELS (1)**, Berlioz and Falla Records. **BRUSSELS (2)**, Orchestra and Records. 5.45—For Children. **BUDAPEST (1)**, Hungarian Chamber Music. 5.30—Talk.
COLOGNE, Operetta Records. 5.25—Review. 5.45—Dance Music.
DEUTSCHLANDSENDER, English Folk Songs. 5.25—Review. 5.45—Talk.
HILVERSUM (1,875 m.), K.R.O. Chamber Orchestra. At 5.25—Greetings. **HILVERSUM** (301.5 m.), Children's Choir. 5.10—Kovacs Lajos Orchestra, Organ.
KALUNDBORG, Chimes, Excerpts, "Follow the Fleet" (Berlin). 5.15—Weather. 5.35—German.
LEIPZIG, Orchestra and Children's Choir.
MUNICH and **MOST GERMAN STATIONS**, Light Music, Pfte.
PARIS (PTT), Paris Symphony Orchestra. Conductor: Tomasi. (Auber, Méhul, Büsser). 5.30—Talk, Notes. **PRAGUE**, Markets. 5.10—German Transmission: Economics, Variety, News, Review.
RADIO-NORMANDIE, Records. 5.15—Orchestra. 5.30—London Music. 5.45—Records. **RADIO-PARIS**, English. 5.20—Talk. 5.30—Paris Symphony Orchestra. Conductor: Tomasi. Denise Sternberg (Pfte.). (Auber, Debussy, Brahms, Chopin).
SOTTENS, Records. At 5.30—Reading. **STOCKHOLM**, Records. 5.45—French.
WARSAW, Talks; Notes.

6 p.m.

ATHLONE, Children's Hour. 6.15—Concertina Selections. 6.35—Irish News. 6.45—Stocks, News.
BERLIN, Talk. 6.15—Soprano and Pfte. with Commentary. 6.45—Echoes. **BEROMÜNSTER**, Widmann Commemoration (contd.). 6.30—News. 6.40—"David and Goliath"—Dialect Play (Juker). **BRESLAU**, "Transylvania"—Radio Pictures (Obst), Music by Sczuka. **BRUSSELS (1)**, Lecture-Recital: Wind and Rain. 6.30—Salon Orchestra. **BRUSSELS (2)**. For Children. 6.30—Records. 6.45—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Educational. 6.20—Edelweiss Tyrolese Ensemble. 6.55—Songs. **BUDAPEST (1)**, Hungarian Folk Songs.
COLOGNE, Dance Music. 6.45—Snapshots.
DEUTSCHLANDSENDER, Variety. 6.45—Echoes. 6.55—Genealogy.
FRANKFURT, "Ernst Moritz Arndt"—Sequence. 6.30—Anti-Waste Campaign. 6.40—Topical. 6.55—Economics, Notes.
HAMBURG, St. Hubert Festival at Bockenem. 6.45—Topical. **HILVERSUM** (1,875 m.), K.R.O. Chamber Orchestra. 6.20—Esperanto. 6.40—Police Messages, Talk. **HILVERSUM** (301.5 m.), Orchestra (contd.). 6.10—Talk. 6.40—For Children. 6.45—A.V.R.O. Dance Band.
KALUNDBORG, News. 6.30—Talk.
KÖNIGSBERG, News. 6.10—Talk. 6.45—Report.
LEIPZIG, Scenes from a Dessau Labour Service Camp. 6.45—Topical.
MUNICH, Quartet in E flat (Reger) by the Strub Quartet. 6.45—Songs.
OSLO, 6.30—Songs.
PARIS (PTT), Orchestra (contd.). Denise Sternberg (Pfte.). 6.30—News, Topical. **POSTE PARISIEN**, Call, Religious Address. 6.17—Leonora Overture (Beethoven). 6.30—Exchange. 6.35—Topical. 6.42—Records, Talk. **PRAGUE**, News. 6.10—Talks. 6.30—"The Kiss"—Opera (Smetana). Conductor: Chalabala.
RADIO-NORMANDIE, Children's Corner. 6.40—Talk. **RADIO-PARIS**, Dramatic. 6.30—Orchestra (contd.). (Weber, Grieg, Périlhou, Gaubert). **ROME**, Record. 6.5—News and Talk (English). 6.20—News in Foreign Languages.
SOTTENS, For Invalids. 6.15—Talk. 6.35—Interlude. 6.50—News. **STOCKHOLM**, French. 6.15—News. 6.30—Cabaret. **STUTTGART**, Records. 6.45—For Girls.
TURIN, News in Foreign Languages.
WARSAW, Discussion. 6.20—"Hunting"—Musical Sequence (Roy).

7 p.m.

ATHLONE, Elgar Music. Orchestra and Pearl Maconkey (Mezzo-Soprano). 7.35—Gaelic Talk. 7.50—Belgian Concert.
BEROMÜNSTER, "David and Goliath"—Play (contd.). 7.50—Symphony in F (v. Dittersdorf). **BRESLAU**, News. 7.10—Winter Relief Request Concert—Orchestra, Choir and Dance Band. **BRUSSELS (1)**, Fourth Symphony in D minor (Schumann) (Records). 7.30—Review. **BRUSSELS (2)**, Records. 7.30—News. **BUCHAREST** and **RADIO-ROMANIA**, Songs. 7.15—Talk. 7.30—Symphony Concert. Conductor: Perlea, Metzner (Violin). **BUDAPEST (1)**, Nándor Alapi. 7.45—News.
COLOGNE, Notes. 7.10—Woodland Songs and Hunting Songs. 7.40—A Visit to a Forester's House.
DEUTSCHLANDSENDER, **STUTTGART**, News. 7.10—"Tally-ho!"—Military Band.
EIFFEL TOWER, News. 7.10—Racing. 7.20—Foreign Affairs; Talk. 7.45—Press Review. 7.55—Home Affairs.
FRANKFURT, News. 7.10—Mozart Concert. Part I: Orchestra, Bass and Solo Instruments.
HAMBURG, BERLIN, News. 7.10—"Bacchus and Hubert"—Autumn Sequence (Harbeck). Music arranged by Girnatis. Choir, Dance Band, Orchestra and Singers. **HILVERSUM** (1,875 m.), Talks; News; Records. **HILVERSUM** (301.5 m.), A.V.R.O. Dance Band. 7.10—English. 7.40—News. 7.50—Variety Concert.
KALUNDBORG, Chimes; Records: "Die Fledermaus" (Strauss). 7.10—Reading. 7.30—See Oslo. **KÖNIGSBERG**, News. 7.10—Winter Relief Fund Concert. Orchestras, Börschel Band and Tenor.
LEIPZIG, News. 7.10—Dessau Orchestra and Singers. **LILLE**, Operetta Music. 7.30—Records.
MONTE CENERI, "Hallo, Vienna, Lugano calling!"—Ticino Concert for Vienna. Orchestra, the Ceresio Singers, Mandoline Band, Soprano and Harpsichord. **MUNICH**, News. 7.10—"Der arme Jonathan"—Operetta (Millöcker). Conductor: List.
OSLO, Talk. 7.30—Concert for the Scandinavian Music Weeks—Norway. Oslo Philharmonic. Conductor: Kramm. Alme (Pfte.) and Maurstad (Hardanger, Fiddle) (Eggen, Borgstrøm, Halvorsen).
PARIS (PTT). Topical. 7.38—Paris Symphony Orchestra. Conductor: Tomasi. (Gounod, Massenet, Thomas). **POSTE PARISIEN**, Talk. 7.6—Sports. 7.10—News. 7.25—Amusements. 7.30—Light Music. 7.45—Paris Programme. **PRAGUE**, "The Kiss" (contd.).
RADIO-NORMANDIE. Concert. 7.40—News. **RADIO-PARIS**, Orchestra (contd.). 7.30—Talks. **ROME**, 7.5—Time; News. 7.30—Talk. 7.40—"I tre fiori"—Play (Pardini).
SOTTENS, Books. 7.20—Orchestra. Conductor: Appia. Arias. **STOCKHOLM**, Report. 7.30—See Oslo.
TURIN, 7.5—Time; News. 7.30—Talks. 7.45—"Conchita"—Opera (Zandonai). Conductor: The Composer.
VIENNA, See Monte Ceneri.
WARSAW, Report: International Congress of Church Music at Frankfurt. 7.10—Chamber Music. Orchestra, Violin, Oboe (Rabaud, Telemann, Haydn, Ekier); at 7.45: News.

8 p.m.

ATHLONE, Belgian Concert. 8.50—What has your County done?
BEROMÜNSTER, Symphony (Dittersdorf) (contd.). 8.25—Soprano, Flute and Harpsichord. 8.55—Overture, "L'isola disabitata" (Haydn). **BRATISLAVA**, Orchestra (Haydn, Mozart, Wagner, Weinberger). **BRESLAU**, Concert (contd.). **BRUSSELS (1)**, Brenders Dance Band. 8.30—"Scandal at the Opera"—Play (Lustig-Geza). **BRUSSELS (2)**, Symphony Orchestra and Soprano. 8.45—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Concert (contd.); at 8.30: News. **BUDAPEST (1)**, 8.5—Records.
COLOGNE, A Visit to a Forester's House (contd.). 8.10—Hunting Music—Choir, Orchestra and Bass-Baritone.
EIFFEL TOWER, Home Affairs. 8.30—Pierre and Robert Constantin Brive.
FRANKFURT, Mozart Concert (contd.). Part II: "Zaide"—Opera. Conductor: Rosbaud.
HAMBURG, BERLIN, "Bacchus and Hubertz" (contd.). **HILVERSUM** (1,875 m.), Records. 8.10—Variety. **HILVERSUM** (301.5 m.), Variety.
KALUNDBORG, See Oslo. 8.30—Talk. **KÖNIGSBERG**, Concert (contd.).
LEIPZIG, Orchestra (contd.). **LILLE**, Records. 8.15—Topical. 8.30—See Paris (PTT).
MONTE CENERI, Ticino Concert (contd.). 8.30—Talk. 8.45—Review. **MUNICH**, "Der arme Jonathan" (contd.).
OSLO, Concert (contd.). 8.30—Talk. 8.40—News.
PARIS (PTT), Talks. 8.30—"Boris Godunov"—Opera (Mussorgsky). National Orchestra and Raugel Choir. Conductor: Inghelbrecht. **POSTE PARISIEN**, Paul Reboux (Records). 8.15—Light Music. 8.30—Waltz (Clacquesin). 8.31—"Sous le Vent"—Play (André-Béart). **PRAGUE**, "The Kiss" (contd.). 8.45—Reading.
RADIO-NORMANDIE, Records. 8.20—Talk. 8.25—Records. **RADIO-PARIS**, Paul Reboux (Records). 8.5—Italian Books. 8.20—Anecdotes. 8.30—News. 8.45—"Soirée de chansonniers"—"Alignez-vouz" presented by Victor Vallier. **ROME**, "I tre fiori"—Play (contd.).
SOTTENS, Orchestra (contd.). 8.15—"Soirée de Chansons." **STOCKHOLM**, See Oslo. 8.30—Poems. 8.45—News. **STRASBOURG**, 8.30—See Paris (PTT). **STUTTGART**, **DEUTSCHLANDSENDER**, Orchestra. Conductor: Schröder.
TOULOUSE, 8.10—Operetta Excerpts. 8.25—Orchestra. 8.55—News. **TURIN**, "Conchita"—Opera (contd.).
VIENNA, See Monte Ceneri. 8.35—Reading.
WARSAW, Chamber Music (contd.). 8.40—Poznań-Warsaw Exchange Programme. Part I from Poznań. Mezzo-Soprano, Violin and Male Voice Choir with Address. Part II from Warsaw. Military Band.

9 p.m.

ATHLONE, 9.5—For Farmers. 9.25—The Week's Anniversary. 9.30—Variety.
BEROMÜNSTER, Overture (Haydn) (contd.). 9.5—News. **BRATISLAVA**, News (Czech, Hungarian). 9.30—Slovak Chansons. **BRESLAU**. News. 9.30—Concert (contd.) **BRUSSELS (1)**, Play (contd.). 9.30—Brenders Dance Band. **BRUSSELS (2)**, Symphony Orchestra, Tenor. **BUCHAREST** and **RADIO-ROMANIA**, Concert (contd.). 9.20—Records. 9.45—News (French, German, Romanian). **BUDAPEST (1)**, 9.5—Orchestra.
COLOGNE, News. 9.20—Chess. 9.30—English Talk. 9.50—French Talk.
DEUTSCHLANDSENDER, News. 9.30—Don Quixote Suite (Telemann).
EIFFEL TOWER, Pierre and Robert Constantin Brive.
HAMBURG, BERLIN, FRANKFURT, News. 9.30—Light Music and Folk Music—Orchestra, Lanner Quartet, Harp and Balalaika. **HILVERSUM** (1,875 m.), Variety. 9.40—K.R.O. Melodists. **HILVERSUM** (301.5 m.), Variety.
KALUNDBORG, News. 9.15—Orchestra. Conductor: Grøndahl (Beethoven, Strauss. Schubert, Mendelssohn, Lanner). **KÖNIGSBERG**, News. 9.20—Review. 9.30—Concert (contd.).
LEIPZIG, News. 9.20—The Legend of St. Hubert (Steigerwald). 9.35—Ackermann (Organ).
MONTE CENERI, Review. **MUNICH**, News. 9.20—Anniversaries. 9.30—To be announced.
OSLO, Topical. 9.15-9.45—Dance Music.
PARIS (PTT). **LILLE**, **STRASBOURG**, "Boris Godunov" (contd.). **POSTE PARISIEN**, "Sous le Vent"—Play (contd.). **PRAGUE**, News. 9.15—Excerpts from Current Plays. 9.35—Records. 9.45—English News.
RADIO-NORMANDIE, Music of Normandy Composers. **RADIO-PARIS**, "Soirée de chansonniers" (contd.). **ROME**, Choirs of the Roman Basilicas. 9.40—To be announced.
SOTTENS, 9.0-9.15—"Soirée de Chansons" (contd.). **STOCKHOLM**, Radio Orchestra. **STUTTGART**, News. 9.20—Review. 9.40—Music from Hamburg.
TOULOUSE, News. 9.10—Light Music. 9.45—Paris Programme.
TURIN, "Conchita"—Opera (contd.).
VIENNA, Variety. 9.10—News. 9.20—Dresden String Quartet (Graener, Haydn).
WARSAW, Poznań-Warsaw Exchange Programme (contd.). 9.30—Literary. 9.45—Dance Music.

10 p.m.

ATHLONE. Variety. 10.30—News; Light Music.
BRESLAU, Concert (contd.). **BRUSSELS (1)**, News. 10.10—Records. **BRUSSELS (2)**, News. 10.10—Records. **BUDAPEST (1)**, Talk. 10.15—Jazz Band.
DEUTSCHLANDSENDER, Records.
EIFFEL TOWER, Pierre and Robert Constantin Brive.
HAMBURG, BERLIN, FRANKFURT, LEIPZIG, Music (contd.). **HILVERSUM** (1,875 m.), K.R.O. Melodists. 10.10—News; Records. 10.25—K.R.O. Boys. 10.55—Records. **HILVERSUM** (301.5 m.), Bridge. 10.40—News. 10.50—Records.
KALUNDBORG, Donde Dance Band.
KÖNIGSBERG. Concert (contd.).
PARIS (PTT), **LILLE**, **STRASBOURG**, "Boris Godunov" (contd.). 10.30—News; Topical. **POSTE PARISIEN**, "Sous le Vent"—Play (contd.). 10.30—Cabaret.
RADIO-NORMANDIE, Normandy Composers (contd.). **RADIO-PARIS**, "Soirée de chansonniers" (contd.). 10.45—Dance Music—Pascal Orchestra. **ROME**, News.
TOULOUSE, Paris Programme. 10.15—Excerpts, "Tosca" (Puccini). 10.40—Chansonnettes. 10.55—News. **TURIN**, "Conchita"—Opera (contd.). 10.30—Dance Music.
VIENNA, Quartets (contd.). 10.20—Notes. 10.30—Operetta Music.
WARSAW, Dance Music.

11 p.m.

BUDAPEST, 11.5—News.
HILVERSUM (1,875 m.), Records. **HILVERSUM** (301.5 m.), Records.
KALUNDBORG, Chimes; Donde Dance Band.
RADIO-NORMANDIE, Dance Music. 11.30—From the Cabane Normande. **RADIO-PARIS**, Dance Music (contd.). 11.15—Light Music—Pascal Orchestra.
STRASBOURG, News (German). **STUTTGART** and **FRANKFURT**, "Serenade"—Records (Bach, Handel, Gluck, Hoffmann, Spohr).
TOULOUSE, Orchestra. 11.40—Operetta Airs. 11.55—News.
VIENNA, Light Orchestral.

12 midnight

RADIO-NORMANDIE, Dance Music. 12.30—Orchestra. **RADIO-PARIS**, 12.0-12.15—Light Music (contd.).
STUTTGART and **FRANKFURT**, "Serenade" (contd.).
TOULOUSE, 12.5—Light Music; Notes.

PRINCIPAL EVENTS

SYMPHONY CONCERTS
7.30 Bucharest: Perlea, Metzner (violin).
7.30 Oslo, Kalundborg, Stockholm: Norwegian Music.
7.50 Beromünster: Symphony (Dittersdorf).

LIGHT CONCERTS
12.15 Radio-Paris: Orchestra, songs.
1.45 Kalundborg: Radio Orchestra.
3.0 Deutschlandsender: Orchestral, songs.
3.30 Swiss stations: Suisse romande Orch.
5.0 Brussels 2: Conductor, Paul Gason.
5.10 Hilversum (301.5 m.): Kovacs Lajos Orchestra, Palla (organ).
5.30 Radio-Paris: Popular orchestral.
7.0 Monte Ceneri, Vienna Ticino prog.
7.10 Breslau: Request concert.
7.10 Deutschlandsender: Military band.
7.20 Sottens: Orchestral and vocal.
7.50 Athlone: Belgian music.
7.50 Hilversum (301.5 m.): Variety concert.
8.0 Brussels 2: Orchestral and vocal.
8.40 Warsaw: Choir, band.
9.0 Stockholm: Light music.
9.5 Budapest 1: Light orchestral.
9.15 Kalundborg: Radio Orchestra.
9.30 Hamburg, etc.: Popular programme.
10.30 Vienna: Operetta music, etc.
11.15 Radio-Paris: Pascal Orchestra.

OPERAS
6.30 Prague: "The Kiss" (Smetana).
7.45 Turin: "Conchita" (Zandonai).
8.30 Paris (PTT), etc.: "Boris Godunov."

OPERETTAS
7.10 Munich: "Der arme Jonathan" (Millöcker).
9.40 National: "Princess Caprice."

CHAMBER MUSIC
4.40 Hilversum (1,875 m.): Chamber orch.
9.20 Vienna: Quartets (Graener, Haydn).
9.30 Deutschlandsender: Suite (Telemann).

RECITALS
4.15 Warsaw: Song, pianoforte.
5.0 Deutschlandsender: English folk songs.
6.0 Budapest 1: Hungarian folk songs.
8.30 National: Peter Dawson (baritone).
8.45 Radio-Paris: Chansonniers.
9.35 Leipzig: Church organ.

PLAYS
7.40 Rome: "I tre fiori" (Pardini).
8.0 Regional: "Laburnum Grove."
8.30 Brussels 1: "Scandal at the Opera."

LAST NEWS BULLETINS, See Monday

DANCE MUSIC
5.45, Cologne; 8.0, Brussels 1; 9.15, Oslo; 9.45, Warsaw; 10.0, Kalundborg; 10.15, Budapest 1; 10.25, Regional; 10.45, Radio Paris; 10.55, National. 11.0, Radio-Normandie.

MISCELLANEOUS
8.15 Sottens: Soirée de Chansons.

TUESDAY (November 3)

NATIONAL

For Time Signals, see Monday.

10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—Hints for the Housewife.
11.0—Records from the Films.
11.30—For the Schools: History.
11.50—Theatre Orchestra.
12.30 p.m.—The Northern Ireland Brass Band; James Breakey (Baritone).
1.30—Harry Engleman's Quintet—Vernon Adcock (Xylophone).
2.0 (ex. Scottish)—Herring Bulletin.
2.0-4.0 (Scottish)—See Regional.
2.5 (ex. Scottish)—For the Schools: The Countryside. 2.30—English. 3.0—Music. 3.35—French.
4.0—This was News—Geoffrey Crowther.
4.20—Theatre Orchestra.
4.45—Gramophone Records.
5.15—Haydn Fawcett Orchestra.
6.0—The First News.
6.20—Bulletin of Special Notices.
6.25—Schubert—3; May Blyth (Soprano). Songs: Dem Unendlichen, Heidenröslein, An die Sonne, Op. 118, No. 5, An den Frühling, Op. 172, No. 5, Mignon, Augenlied, Mein Gruss an den Mai, Lambertine, Hermann und Thusnelda, Hoffnung, Rastlose Liebe.
7.0—Charles Ernesco and his Quintet.
7.30 (ex. Scottish)—Talk: "Making Ends Meet in the Cottage."
7.30 (Scottish) — Talk—"Burgh Government To-day and Long Ago."
8.0—Van Phillips Orchestras.
8.30—Peter Dawson (Baritone).
9.0—The Third News.
9.20—Talk—Scientists at Work.
9.40—"Princess Caprice." Franklyn Kelsey, Ernest Sefton, Bernard Ansell, Sybil Evers, Horace Percival, Betty Huntley Wright, George Graves, Morgan Davies, Colleen Clifford.
10.55—Maurice Winnick and his Orchestra.
11.30—Dance Records.

REGIONAL

For Time Signals, see Monday

10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—Cinema Orchestra.
11.30—BBC Northern Orchestra.
12.30 p.m.—Organ—Frank A. Chapple.
1.15—BBC Theatre Orchestra,
2.0 (ex. Scottish)—Dance Records.
2.0 (Scottish)—For the Schools: 2.5—"How the Town Lives." 2.30—Elementary French.
2.30 (ex. Scottish)—Geiger Orchestra.
3.0—Torquay Municipal Orchestra; Henry Gill (Baritone), Irene Kohler (Pfte.).
4.0 (Northern)—Evensong from York Minster.
4.30—William Cowper, Selected by Lord David Cecil.
4.45—The Philip Whiteway Ensemble.
5.15—The Children's Hour.
5.40 (Regional, Midland, Scottish)—"Beethoven"—Talk by Victor Hely-Hutchinson.
5.40 (N. Ireland)—"Wild Geese"—Talk by C. M. Skerrett-Rodgers.
6.0 (ex. Midland, N. Ireland)—Quentin Maclean at the BBC Theatre Organ.
6.0 (Midland)—Coventry Band.
6.0 (N. Ireland)—Alex Monaghan and his Orchestra.
6.20 (Scottish)—For Scottish Farmers.
6.25 (Regional)—Carrol Levis and his Discoveries; Jean Melville (Pfte.).
6.25 (Western)—Band.
6.25 (Northern)—Dance Band.
6.40 (Midland, N. Ireland)—"1066 and All That," presented by Emile Littler and Sir Barry Jackson.
6.40 (Scottish)—Cinema Organ.
7.0—The Second News.
7.20—Regional Announcements.
7.30 (Regional, N. Ireland)—BBC Military Band.
7.30 (Midland)—Records.
7.30 (Western)—Welsh part-songs and poetry.
7.30 (Northern)—Choral Concert.
7.30 (Scottish)—Variety.
8.0 (ex. N. Ireland)—"Laburnum Grove"—J. B. Priestley.
8.0 (N. Ireland)—"The Drone"—Comedy by Rutherford Mayne.
9.15 (Regional, Midland, N. Ireland)—BBC Midland Orchestra.
9.15 (Western)—The Clifton Light Orchestra; Winifred Davey (Pfte.).
9.15 (Northern)—Heard this one?
9.15 (Scottish)—A Ceilidh in a Crofter's House in Bernera, Lewis.
9.30 (Northern)—William Congreve, by Francis Dillon.
9.50 (Scottish)—Scottish News.
10.0—News Summary.
10.25—Dance Music.
10.25 (Western)—Welsh News.
11.30—Late News Summary.
11.40—John Hunt (Pfte.).

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).
1.30-2.30 p.m.—Time; Weather; Stocks; Records. 5.30—Children's Hour. 6.15—Concertina Selections. 6.35—Irish News Feature. 6.45—Weather; Stocks; News; Time.
7.0—Elgar Songs and Music by the Station Orchestra. Pearl Maconkey (Mezzo-Soprano). Suite, The Crown of India. Serenade for Strings. Chanson de matin.
7.35—Gaelic Talks on World Literature—Bulgaria by Sean O'Beirne.
7.50—Belgian Concert. Belgian National Anthem. Talk by M. Goor: Belgium. Belgian Music by the Station Orchestra. Songs in French, with Commentary. Talk: Belgian Literature. Flemish Songs with Commentary. 8.50—What has your County done? 9.5—The Jolly Farmers—A Discussion for Agriculturalists. 9.25—The Week's Anniversary. 9.30—Variety. 10.30—What happened to-day; Light Music. 11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.); 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.-1.0 p.m.—See Breslau. 1.0—News. 1.15—Berlin Opera Announcements. 2.0-2.30—Exchange; Markets.
3.30—Variety—Station Orchestra and others. 4.30—Talk: Schliemann's Excavations at Troy.
5.0—See Munich. 6.0—Talk: Jiu Jitsu.
6.15—Erika Legart (Soprano) and Hannemann (Pfte.). Commentary by von Benda. 6.45—Evening Echoes.
7.0—News; Topical.
7.10—See Hamburg. 9.0—News.
9.30-11.0—See Hamburg.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).
5.30 a.m.—Gym. 11.0—Italian Light Music. Conductor: Henrich. 11.29—News.
11.40 a.m.-12.45 p.m.—Radio Orchestra. Conductor: Bernhard. 3.0—Talk.
3.30-5.0—See Sottens.
5.0-8.55—From Berne.
5.0—Report from a Sawmill. 5.25—Music. 5.30—J. V. Widmann Commemoration Programme. 6.30—News.
6.40—"David and Goliath"—Four-Act Dialect Play after von Tavel (Juker), from the Heimatschutz Theater, Berne.
7.50—Symphony in F (v. Dittersdorf) by the Radio Orchestra. Conductor: Bernhard. 8.25—Leni Neuenschwander (Soprano), Tassinari (Flute), Zulauf (Harpsichord).
8.55—Overture, "L'isola disabitata" (Haydn) by the Radio Orchestra. Conductor: Bernhard. 9.5—News.

BORDEAUX-LAFAYETTE (France)

1,077 kc/s (278.6 m.); 12 kW.
Transmits at intervals from 6.50 a.m.
6.30 p.m.—News; Topical. 7.45—Sports.
8.0—Records. Arias, "The Girl of the Golden West" (Puccini), "Manon Lescaut" (Puccini) and "Mirella" (Gounod). 8.15—News.
8.30—See Paris (PTT). 10.30—News.

BRATISLAVA (Czechoslovakia)

1,004 kc/s (298.8 m.); 13.5 kW.
Transmits at intervals from 6.15 a.m.
7.25 p.m.—Kalas (Baritone). Aria, "Eugene Onegin" (Tchaikovsky). Russian Song. Pour un baiser (Tosti). At Dawning (Cadman). Absent (Metcalf). Only for you (Geehl). 7.45—Talk.
8.0—Station Orchestra: Conductor: Schimpl. Nocturne (Haydn). Eine kleine Nachtmusik (Mozart). Siegfried Idyll (Wagner). Overture, "Nicholas Dacický of Heslov" (Weinberger).
9.0—News (Czech, Hungarian). 9.30—Cikl (Slovak Chansons). 10.0-10.15—Morse.

BRESLAU (Germany)

950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).
Transmits at intervals from 4.0 a.m.
11.0 a.m.—Light Orchestral; at 12.0 noon: News. 1.0 p.m.—News.
1.15—Variety, from Deutschlandsender. 2.0—Markets. 3.0—For Children. 3.30—For Women. 3.45—Discussion: Training in Economics in Hungary and Germany.
4.0—Orchestra, from Deutschlandsender. 4.40—Robert Hohlbaum reads.
5.0—See Munich. 5.50—Announcements.
6.0—"Transylvania"—Radio Pictures (Obst), Music by Sczuka. Station Choir, Orchestra, and Players. Conductor: Wirth. 7.0—News.
7.10-11.0—Winter Relief Request Concert. Station Orchestra, Choir, Dance Band, and Artists. Conductors: Topitz and Rau; at 9.0-9.30: News.

BRNO (Czechoslovakia)

922 kc/s (325.4 m.); 32 kW.
8.45 p.m.—Humorous Readings. 9.0—News; Review; Sports. 9.15—Records: Light Music.
9.45—See Prague. 10.0-10.15—Morse.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.); 15 kW.
6.37-9.0 a.m.—Records; News; Gym.
12.0 noon—Rossini Records. Excerpts, "William Tell" and "The Italian Girl in Algiers." 12.30 p.m.—Salon Orchestra. Conductor: Féron. 1.0—News. 1.10—Radio Orchestra. Conductor: Gason. 1.30—Records. 2.0—Art Notes.
4.55—News.
5.0—Records. Symphonie fantastique (Berlioz). Dances, "La vida breve" (Falla).
6.0—Lecture-Recital: Wind and Rain.
6.30—Salon Orchestra. Conductor: Féron.
7.0—Fourth Symphony in D minor (Schumann), on Records. 7.30—Review.
8.0—Brenders Dance Band.
8.30—"Scandal at the Opera"—Play (Lustig-Geza).
9.30—Brenders Dance Band. 10.0—News.
10.10-11.0—Records. Pfte. Concerto in B flat (Tchaikovsky), with Solomon. Escales (Ibert).

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.
6.37-9.0 a.m.—Records; Gym; News.
12.0 noon—Records. 12.30 p.m.—Radio Orchestra. Conductor: Gason.
1.0—News. 1.10—Salon Orchestra. Conductor: Féron. 1.30—Records.
2.0—Shipping.
4.55—News. 5.0—Radio Orchestra, Conductor: Gason, and Records.
5.45—For Children. 6.30—Records.
6.45—Talk: Contemporary Problems.
7.0—Records. 7.30—News.
8.0—Symphony Orchestra. Jenny Jungbauer (Soprano). Overture, "Ruy Blas" (Mendelssohn). Songs (Strauss, Millöcker, Zeller). Hungarian Rhapsody (Liszt). Songs (Strauss, Lehár). 8.45—Talk.
9.0—Symphony Orchestra. Armand Crabbé (Tenor). Overture, "Isabella" (Suppé). Songs (Maurage, Pergolesi). Bal costumé (Rubinstein). Songs (Rimsky-Korsakov, Kern, Spoliansky). Overture, "La Cenerentola" (Rossini). 10.0—News.
10.10-11.0—"Music-Hall"—Records.

BUCHAREST (Romania)

823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov), 160 kc/s (1,875 m.).
Transmits at intervals from 4.30 a.m.
6.0 p.m.—Educational Programme.
6.20—"Edelweiss" Tyrolese Ensemble.
6.55—Ivanescu (Songs). Why? (Penino). Mal d'amore (Buzzi-Peccia). Canta pe me (Curtis). Song (Tagliaferri). Occhi turchini (Denza).
7.15—Talk.
7.30—Symphony Concert by the Radio Orchestra. Conductor: Perlea. Metzner (Violin); at 8.30: News; Sports. 9.20—Records: Light Music. 9.45—News (French, German, Romanian).

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.); 120 kW.
Transmits at intervals from 5.45 a.m.
11.0 a.m.—Chimes. 11.5—Records.
12.30 p.m.—Military Band. Conductor: Figedy. 3.10—For Women.
4.0—Report from the Town Park.
4.45—Hungarian Chamber Music.
5.30—Talk: Hunting. 6.0—Hungarian Folk Songs by Margit Bodán with the Veress Cigány Band. 7.0—Nándor Alapi. 7.45—News. 8.5—Records.
9.5—Light Music—Station Orchestra.
10.0—Talk in a Foreign Language.
10.15—Kertész Jazz Band. 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.); 18 kW.
4.0 p.m.—Records. 5.0—French Lesson. 6.0—For Farmers. 6.30—Talk. 7.0—Palotai ('Cello).

COLOGNE (Germany)

658 kc/s (455.9 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Orchestra. 12.0 noon—Announcements.
12.15 p.m.—Orchestra, from Breslau.
1.0—Announcements. 1.15—Guessing Game. 2.45—Economics. 3.0—Labour Camp Reports. 3.15—Holzäpfel (Baritone), Fassbender Trio.
4.0—Books. 4.15—Operetta Records.
5.25—See Deutschlandsender. 5.45—Dance Music by the Station Orchestra. 6.45—Snapshots. 7.0—Announcements.
7.10-9.0—Programme for St. Hubert's Day. 7.10—Woodland Songs and Hunting Songs by Boys and Girls.
7.40—A Visit to a Forester's House.
8.10—Hunting Music. Station Chamber Choir and Orchestra. Conductor: Kühn. Schneider (Bass-Baritone). Movements, "La Chasse" (Haydn). Hunting Chorus, "The Seasons" (Haydn). Song with Chorus, "Hans Heiling" (Marschner). Overture, "Das Nachtlager in Granada" (Kreutzer). Hunting Chorus, "Der Freischütz" (Weber). Halali (Koch). Hunting Overture (Künneke).
9.0—News. 9.20—Chess. 9.30—English Talk. 9.50-10.5—French Talk.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.); 60 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Orchestra. 12.45 p.m.—News.
1.0—Variety. 2.0—Announcements.
2.15—Talk. 2.25—Talk: Dalecarlian Folk Art. 2.45—Cinema Organ Records.
3.0—Orchestra and Songs. Part I. Light Music. Part II. Hungarian Music; at 3.50-4.0: Goethe Anecdotes.
5.0—English Folk Songs by Hilde Kretschmer (Soprano). 5.25—Political Press Review. 5.45—Talk for Women. 6.0—"The Circus"—Variety. In the intervals: "The Vegetarian Lion"—Humorous Scene (Krause); Topical. 6.45—Echoes. 6.55—Genealogy. 7.0—Motto; News.
7.10—"Tally-ho!"—Military Band. Der Jäger aus Kurpfalz (Rhode). Overture, "Der Wildschütz" (Lortzing). Fantasia on "Grün ist die Heide" (Blume). Excerpts, "Der Freischütz" (Weber). Quadrille, Waldmanns Jubel (Reckling). Hunting Fantasy (Prager).
8.0—See Stuttgart. 9.0—News.
9.30—Don Quixote Suite (Telemann), by the Ristenpart Chamber Orchestra.
9.45—Weather. 10.0-11.0—Records.

FRANKFURT (Germany)

1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg, and Trier, 1,195 kc/s (251 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.-1.0 p.m.—See Breslau.
1.0—News. 1.10—Records. 2.0—Talk: Economics. 2.15—Heima Kolbe (Soprano) and Knoll (Tenor).
3.0—Light Orchestral. 4.30—Talk; Sketch.
5.0—See Munich.
6.0—"Ernst Moritz Arndt"—Sequence. 6.36—Anti-Waste Campaign. 6.40—Topical. 6.55—Announcements. 7.0—News.
7.10—Mozart Concert. Part I. Station Orchestra and Solo Instruments. Conductor: Rosbaud. Alsen (Bass). March in C. Per questa bella mano, for Bass with Double Bass and Orchestral Obbligato. Divertimento in E flat. Part II. "Zaide"—Opera. Station Choir and Orchestra. Conductor: Rosbaud.
9.0—News.
9.30—See Hamburg.
11.0 p.m.-1.0 a.m. (Wednesday)—See Stuttgart.

HAMBURG (Germany)

904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg, and Stettin, 1,330 kc/s (225.6 m.).
Transmits at intervals from 5.15 a.m
11.0 a.m.—Announcements. 11.10—For Housewives.
11.20—Orchestra, from Breslau. 1.0 p.m.—News. 1.20—Light Music.
2.0—Exchange; Shipping. 2.30—Band Records. 3.0—Orchestra. 4.0—Books. 4.15—Variety.
5.0—See Munich. 5.45—Shipping; Weather. 6.0—St. Hubert Festival at Bockenem. 6.45—Topical. 7.0—News
7.10—"Bacchus and Hubert"—Wine, the Chase and . . . Love—Autumn Sequence (Harbeck). Music arranged by Girnatis. Station Mixed Choir and Dance Band. Conductor: Gregor. Hamburg Harbour Concert Orchestra and Singers. In the interval: "Der vergrämte Bock"—Sketch (Kunze).
9.0—News.
9.30-11.0—Light Music and Folk Music. Station Orchestra. Conductor: Secker. Lanner Quartet, Renate Adolphi (Harp) and Valerian Schumakoff (Balalaika).

HILVERSUM (1,875 m.) (Holland)

160 kc/s; 10 kW until 2.40 p.m.; 100 kW from 2.40 p.m.
K.R.O. Programme.
7.40-8.55 a.m.—Records. 9.40—Records. 11.10—Religious Address. 11.40—Police Messages. 11.45—K.R.O. Orchestra. Conductor: van 't Woud. Records in the intervals.
1.0 p.m.—K.R.O. Melodists. Conductor: Lustenhouwer. Klein (Refrains).
1.40—Dressmaking Lesson. 3.45—Records; Recitations; Records.
4.40—K.R.O. Chamber Orchestra. Conductor: Reinards; at 5.25: Greetings. 6.20—Esperanto Lesson.
6.40—Police Messages; Talks; News; Records.
8.10—Variety. 9.40—K.R.O. Melodists and Klein (Refrains). 10.10—News: Records. 10.25—K.R.O. Boys and Klein (Refrains). 10.55-11.40—Records.

HILVERSUM (301.5 m.) (Holland)

995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
A.V.R.O. Programme.
7.40 a.m.—Records. 9.40—Service.
9.55—Records. 10.10—Kroon Orchestra. 10.40—For Women. 11.10—Kroon Orchestra. 12.10 p.m.—Records. 1.10—Palla (Organ). 1.30—Records. 1.40—A.V.R.O. Orchestra. Conductor: Treep. 2.45—Dressmaking. 3.40—Sandor Orchestra.
4.10—Children's Choir.
5.10—Kovacs Lajos Orchestra; Palla (Organ). 6.10—R.V.U. Talk. 6.40—For Children.
6.45—A.V.R.O. Dance Band. 7.10—English Lesson. 7.40—News.
7.50—Variety Concert. A.V.R.O. Orchestra and Dance Band, Palla (Organ), Grethe Weinjnschenk-Hogenbirk (Soprano), Baylé (Baritone).
10.0—Bridge. 10.40—News.
10.50-11.40—Records.

KALUNDBORG (Denmark)

240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).
Transmits at intervals from 6.0 a.m.
11.0 a.m.-1.0 p.m.—Andersen String Ensemble. 1.45—Radio Orchestra. Conductor: Wendelboe-Jensen. Hansen (Pfte.). 3.20—Reading. 3.50—Announcements. 3.56—Poem. 4.0—Recitation. 4.25—Weather. 4.40—Exchange; Markets. 4.50—Records.
5.0—Chimes.
5.1—Excerpts, "Follow the Fleet" (Berlin), from the Metropole. 5.15—Weather. 5.35—German Lesson. 6.0 News. 6.30—Talk: Crime and the Community—Rights and Privileges.
7.0—Chimes. 7.1—Records: "Die Fledermaus" (Strauss). 7.10—Reading (Jensen).
7.30—See Oslo.
8.30—Legal Talk. 9.0—News.
9.15—Radio Orchestra. Conductor: Gröndahl. Overture, "King Stephen" (Beethoven). Loreley Rheinklänge (Strauss). Ballet, "Rosamunde" (Schubert). Scherzo, "A Midsummer Night's Dream" (Mendelssohn). Overture, "Tsar and Carpenter" (Lortzing).
10.0-11.30—Donde Dance Band; at 11.0—Chimes.

KÖNIGSBERG (No. 1) Heilsberg) (Germany)

1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).
Transmits at Intervals from 5.0 a.m.
11.0 a.m.—See Breslau. 1.0 p.m.—News. 1.10—For Women. 1.25—Upper Bavarian Folk Music (Records).
2.0—For Children. 2.25—Light Orchestral; at 3.30: Topical. 4.5—Songs by East Prussian Composers—Ruth Franz Schöbel (Soprano).
4.25—Talk: Gerrit Engelke. 4.40—Talk: Christmas.
5.0—See Munich.
6.0—News. 6.10—Talk: The World's Menus. 6.45—Report: Aviation for Boys. 7.0—News.
7.10-11.0—Concert for the Winter Relief Fund. Station Orchestras. Conductors: Meyer, Kaestner, Wöllner, and Wilcken. Börschel Band. Sengeleitner (Tenor); at 9.0: News; at 9.20: Political Press Review.

LAHTI (Finland)

166 kc/s (1,807 m.); 150 kW. Relayed by Helsinki, 895 kc/s (335.2 m.).
Transmits at intervals from 6.5 a.m.
4.0 p.m.—Talk. 4.20—Violin Concerto in D (Mozart) by Szigeti and the London Philharmonic Orchestra. Con-

ductor: Beecham (Records). 5.0—News (Finnish, Swedish).
5.15—"Muru"—Play (Tavastjerna).
5.45—Eirto (Songs). 6.5—'Cello.
6.35—Talk. 7.0—News (Finnish, Swedish). 7.20—Talk on the following Concert.
7.30-8.30—See Oslo. 8.30-10.0—Classical Music.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Military Band from Dessau. 12.0 noon—News. 12.15 p.m.—Orchestra. 1.0—News; Exchange. 1.15 (from Dessau)—Mozart Music and Wilhelm Busch Readings. Wüstinger (Violin), Donath (Pfte.), Schmidt (Speaker). 2.0—For Women. 3.0—Talk: Dessau Humour. 3.20—Chamber Music of Dessau Composers. 4.0—Weather; Economics. 4.10—Herr Freyberg and Dr. Ihlenburg at the Microphone. 4.30—Music. 4.40—Talk. 5.0—Dessau Orchestra and Children's Choir. 6.0—In a Dessau Labour Service Camp. 6.45—Topical. 7.0—News. 7.10—Dessau Orchestra and Singers. Conductor: Fuchs. 9.0—News. 9.20—"The Legend of St. Hubert" (Steigerwald).
9.35—Organ Recital by Franz Ackermann from St. John's Church, Dessau. Choral Fantasy on "Jesu, meine Freude" (Bartmus). Prelude, Intermezzo and Finale (Ackermann).
10.0-11.0—Music from Hamburg.

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
8.30 p.m.—See Paris (PTT). 10.30—News.

LYONS (PTT) (France)

648 kc/s (463 m.); 100 kW.
Transmits at intervals from 6.50 a.m.
6.30 p.m.—News. 7.30—Surprise Programme. 8.0—Talks.
8.30—See Paris (PTT). 10.30-11.0—News.

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.): 15 kW.
Transmits at intervals from 11.0 a.m.
7.0 p.m.—"Hallo Vienna. Lugano calling!"—Ticino Concert for Vienna. Station Orchestra. Conductor: Casella. The Ceresio Singers. Conductor: Filipello. The Faliero Mandoline Band. Tina Paggi (Soprano), and Nino Herschel (Harpsichord). Potpourri of Ticino Songs (Vicari). Orchestra and Choir: La Maggiolata (Filipello). Interlude, An Unexpected Visit. Songs: (a) Waltz Song, "Mirella" (Gounod), (b) Bell Song, "Lakmé" (Delibes). Gavotte-Caprice (Bortkiewicz). Song, Frühlingsstimmen (Strauss). Mandoline Band: (a) Corteggio dei mughetti (Maciocchi), (b) Waltz, Passione (Ranzato). Singers: Aveva gli occhi neri. Mandoline Band: Lullaby (De Micheli). Singers: Bella ti vidi nascere. Mandoline Band: Portami tante rose (Bixio). Singers: Erano tre sorelle. Mandoline Band: Gallop, In treno (Porta).
8.30—Talk: Cobblers who became famous. 8.45-9.15—Fortnightly Review.

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Military Band from Bayreuth. 12.0 noon—News. 12.15 p.m.—Bayreuth Radio Sextet. 12.45—News; Exchange.
1.0-2.0—See Deutschlandsender. 2.40—Anton Dörfler reads. 3.0—For Farmers. 3.10—For Women. 3.50—Unfamiliar Schubert Music from Bayreuth. Wang and Reisch (Pftes.) and Meta Meik-Körig (Soprano). 4.45—Call of Youth. 4.50—For Farmers.
5.0—Light Orchestral. Conductor: Mihalovic. Ilse von Tschurtschenthaler (Pfte.).
6.0—Quartet in E flat (Reger) by the Strub Quartet. 6.45—Songs by Boys (Recorded). 7.0—News.
7.10—"Der arme Jonathan"—Operetta (Millöcker). Station Choir and Orchestra. Conductor: List.
9.0—News. 9.20—Anniversaries—November 9th, 1918, 1923, 1933.
9.30—To be announced.
10.0-11.0—Music from Hamburg.

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trøndelag, 629 kc/s (476.9 m.).
Transmits at intervals from 10.40 a.m.
6.30 p.m.—Time; Henriette Heide (Jordan, Schubert, Lunde and Massenet Songs). 7.0—Talk.
7.30—Concert for the Scandinavian Music Weeks—Norway. Oslo Philharmonic. Conductor: Kramm. Alme (Pfte.) and Maurstad (Hardanger Fiddle). Organ Chaconne in G minor, arr. for Symphony Orchestra (Eggen). Symphonic Poem for Pfte. and Orchestra, Hamlet (Borgstrøm). Suite, Fossegrimen (Halvórsen).
8.30—Talk. 8.40—News. 9.0—Topical. 9.15-9.45—Dance Music.

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
7.0 p.m.—News. 7.10—Racing. 7.20—Foreign Affairs; Science Talk. 7.45—Press Review. 7.55—Home Affairs. 8.30—Programme with Pierre and Robert Constantin Brive.

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
Transmits at intervals from 7.10 a.m.
12.0 noon—Exchange. 12.5 p.m.—Records; at 12.35: Exchange. 1.35—Radio Amateur Prize-winners at the Microphone. 1.50-2.0—News. 2.0, 3.45, and 4.35—Exchange. 6.0—Call. 6.2—Religious Address. 6.17—Leonora Overture (Beethoven). 6.30—Exchange. 6.35—Topical. 6.42—Records. 6.59—Topical. 7.6—News.
7.30—Light Music. 7.45—Paris Programme. 8.0—Paul Reboux (Records). 8.15—Light Music. 8.31—"Sous le Vent"—Three-Act Play (André-Béart). 10.30-11.0—Cabaret.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m.
2.30 p.m.—"La volonté de l'homme"—Three-Act Play (Tristan Bernard).
4.0—Gourevitch (Pfte.).
4.15—Reading (Mark Twain). 4.30—Singing Lesson.
5.0—Paris Symphony Orchestra. Conductor: Tomasi. Overture, "Fra Diavolo" (Auber). Overture, "La chasse du jeune Henri" (Méhul). Petite Suite (Büsser).
5.30—Music Talk. 5.40—Art Notes. 5.50—Science Notes.
6.0—Paris Symphony Orchestra. Conductor: Tomasi. Denise Sternberg (Pfte.). Old Dance Suite (Mozart). Viennese Dances (Beethoven). Pfte. (a) Retour des muletiers (Déodat de Séverac), (b) Pastourelle (Poulenc), (c) Carillons du Campanile (Dupin), (d) Printemps (Milhaud), (e) Deux visions fugitives (Prokofiev).
6.30—News; Topical. 7.30—Weather.
7.38—Paris Symphony Orchestra. Conductor: Tomasi. Overture, "Faust" (Gounod). Prelude to Acts IV and V, "Don Quixote" (Massenet). Danish March (Thomas). 8.0—Talks.
8.30—"Boris Godunov"—Four-Act Opera (Mussorgsky) from the Salle Pleyel. National Orchestra and Raugel Choir. Conductor: Inghelbrecht. Cast: MM. Etcheverry, Planel, Morturier, Faniard, Mme. Turba-Rabier, Germaine Corney.
10.30—News; Topical.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
6.45 a.m.—Gym. 7.0—Records.
7.15—Press Review. 7.45—Gym.
8.0—Records. 11.0—Poulet Concert Orchestra. Conductor: Clergue.
12.0 noon—For Farmers. 12.15 p.m.—Orchestra (contd.), Laurence (Songs); at 12.45: News. 2.0—Reading (Walter Scott). 2.25—Legal Talk.
2.30—Dance Records. 3.0—Records.
3.30—Hans Andersen Tale. 3.45—Talk: Captain Cook and Bougainville. 4.0—Records. 5.0—English Lesson. 5.20—Talk.
5.30—Paris Symphony Orchestra. Conductor: Tomasi. Denise Sternberg (Pfte.). Feuilles d'images (Aubert). Waltz, La plus que lente (Debussy). Pfte.: (a) Intermezzo in E flat (Brahms), (b) Caprice in B minor (Brahms), (c) Preludes (Chopin), (d) Etudes (Chopin).
6.0—Dramatic Excerpts.
6.30—Paris Symphony Orchestra. Conductor: Tomasi. Overture, "Euryanthe" (Weber). Norwegian Dances (Grieg). Divertissement for Wind Instruments (Périlhou). Esquisses and Madrigal (Gaubert).
7.30—Talk: The History of Paris Theatres. 7.45—Talk. 8.0—Paul Reboux (Records). 8.5—Italian Book Review. 8.20—Anecdotes. 8.30—News.
8.45—"Soirée de chansonniers"—Alignez-vous, presented by Victor Vallier.
10.45—Dance Music by the Victor Pascal Orchestra.
11.15 p.m.-12.15 a.m. (Wednesday)—Light Music—Victor Pascal Orchestra.

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.): 120 kW.
Transmits at intervals from 5.15 a.m.
4.30 p.m.—Wanderlieder (Mahler) sung by Peterka. 5.0—Markets. 5.10—German Transmission: Economics; Variety. 5.45—News (German). 5.55—Review (German). 6.0—News. 6.10—Talk: Invisible Stars. 6.25—Talk on the following Programme.
6.30—"The Kiss"—Opera (Smetana) from the Opera. Conductor: Chalabala. 8.45—Reading. 9.0—Time; News. 9.15—Excerpts from Current Plays. 9.35—Records. 9.45-10.0—English News.

RADIO CÔTE d'AZUR (Juan-les-Pins) (France)

1,276 kc/s (235.1 m.); 27 kW.
Transmits at intervals from 12.15 p.m.
6.15 p.m.—Dance Music. 6.30—Variety.
7.0—Symphony in G minor—The Unfinished (Schubert). 7.25—Amusements; For Children. 7.30—Request. 7.40—Humorous Programme. 7.55—For Farmers. 8.0—News; Exchange.
8.20—Ballet egyptien (Luigini). 8.30—Ray Ventura. 9.5—Weather. 9.10—Variety. 10.0—News. 10.15—Dance Music.

Gianna Pederzini, the "Conchita" in Zandonai's opera at Turin, 7.45 p.m.

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Band; at 7.10: News. 8.0—Records. 8.15—Light Music. 8.30—Records. 8.45—Popular Music. 9.0—Records. 9.15—Jack Savage and his Cowboys. 9.30—Light Music. 9.45—Records. 10.0—Light Music. 10.45—Records. 11.0—Chansonnettes. 12.0 noon—Sirjo (Songs). 12.20 p.m.—Records. 12.40—News. 1.0—Concert. 2.0—Records.
2.15—Light Music. 2.30—Records.
3.0—Light Music. 3.30—Records. 3.45—Concert. 4.45—For Children. 5.0—Records. 5.15—Orchestra. 5.30—London Music. 5.45—Records. 6.0—Children's Corner. 6.40—Talk; Racing. 7.0—Concert. 7.40—News. 8.0—Records. 8.20—Talk. 8.25—Records.
9.0—Music of Normandy Composers. 11.0—Dance Music. 11.30—From the Cabane Normande. 12.0 m't—Dance Music. 12.30-1.0 a.m. (Wednesday)—Orchestra.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2), and Turin (No. 2), 1,357 kc/s (221.1 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15—Sonatas (Scarlatti and Bossi). Astolfi (Violin) and Arnaldi (Pfte.). 4.55—Morse. 5.50—Announcements. 6.0—Record. 6.5—News and Talk (English). 6.20—News in Foreign Languages. 7.5—Time; News. 7.30—Talk.
7.40—"I tre fiori"—Three-Act Play (Pardini).
9.0—Choirs of the Roman Basilicas. Conductor: Antonelli. Two Motets (Palestrina). Ave Maria (Vittoria). Credo from the Missa Papae Marcelli (Palestrina). Neve non tocca (Perosi). Vezzosi augelli (Marenzio). Canzonetta (Geep). Ritorna del gregge (Müller). 9.40—To be announced. 10.0 (approx.)—News.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 5.0 a.m.
5.0 p.m.—Athanassa Thodorova (Songs). 5.20—Light Music. 5.30—Violin and Pfte. Sonatas. 6.10—Opera Music. 6.25—Music Review. 6.35—Light Music. 6.55—Talk.
7.10—Athanassov Memorial Recital. Chintchev (Tenor) and Véra Michaïlova-Lazarova (Pfte.). 7.45—News. 8.0-9.0—Light Music and Dance Music; at 8.30: Notes.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.—See Beromünster. 11.30—News.
11.40 a.m.-12.45 p.m.—See Beromünster.
3.30—Radio Suisse romande Orchestra. Conductor: Haug. 4.0—Spehl (Horn). 4.30—Opera Music by the Radio Suisse romande Orchestra. Conductor: Haug. 5.0—Records. 5.30—Reading. 5.50—Records. 6.0—For Invalids. 6.15—Talk: Dentistry. 6.35—Interlude. 6.50—News. 7.0—Books.
7.20—Radio Suisse romande Orchestra. Conductor: Appia. Overture, "Il Guarany" (Gomez). Aria (Sammartini). La Nursery (Inghelbrecht). Ballet, "La Source" (Delibes). Selection, "White Horse Inn" (Stolz-Benatzky).
8.15-9.15—Soirée de Chansons, with Edith Burger and René Bersin and Company.

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.), and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
4.30 p.m.—Folk Music by Zetterström (Jew's Harp). 4.45—Records. 5.45—French Lesson. 6.15—News. 6.30—Cabaret by Birgit Kronström and Ericson. 7.0—Report.
7.30—See Oslo.
8.30—Poems (Nyström). 8.45—News.
9.0-10.0—Radio Orchestra. Overture, "Die Matrosen" (Flotow). Chant sans paroles (Tchaikovsky). Vive la danse (Waldteufel). Melody (Ketelbey). Selection, "The Land of Smiles" (Lehár). In the Tea Gardens of Ceylon (Yoshitomo). Quadrille (arr. Kermbach-Ralph). Nights in Morocco (Schleich-Fillipini).

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
8.30 p.m.—See Paris (PTT). 10.30—News. 11.0—News (German).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Breslau. 12.0 noon—News. 12.15 p.m.—Records.
1.0-2.0—See Deutschlandsender. 2.15—Talk.
3.0—See Deutschlandsender. 4.45—Technical Talk.
5.0—See Munich.
6.0—Records. 6.45—For Girls.
7.0—News.
7.10—See Deutschlandsender.
8.0—Station Orchestra. Conductor: Schröder. Overture, "Indra" (Flotow). Excerpts, "Tiefland" (d'Albert). Overture, "Pique Dame" (Suppé). Dynamiden-Waltzer (Strauss). Hungarian Rhapsody (Liszt).
9.0—News. 9.20—Political Press Review. 9.40—Music from Hamburg.
11.0 p.m.-1.0 a.m. (Wednesday)—Serenade—Records. Organ Prelude and Fugue (Bach). Two Songs (Bach). Pfte. Variations in E (Handel). Pfte. Suite in F sharp minor (Handel). Ach, ich habe sie verloren (Gluck). Overture, "Armide" (Gluck). Quintet (Hoffmann). Excerpts, "Harlekin" (Hoffmann). Double Quartet (Spohr).

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
8.10 p.m.—Excerpts, "Les cloches de Corneville" (Planquette). 8.25—Orchestra. 8.40—Light Music. 8.55—News. 9.10—Light Music.
9.25—Excerpts, "The Merry Widow" (Lehár), "Dédé" (Christiné).
9.45—Paris Programme. 10.15—Excerpts, "Tosca" (Puccini). 10.40—Chansonnettes. 10.55—News. 11.0—Argentine Orchestra. 11.15—Film Music.
11.40—Operetta Airs.
11.55—News. 12.5 a.m. (Wednesday)—Light Music. 12.20—Marches. 12.30—Announcements.

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15—Dance Music.
4.55-5.5—For Women. 5.50—Announcements. 6.0—News in Foreign Languages. 7.5—Time; News. 7.30—Talk. 7.40—Talk on the following Opera.
7.45—"Conchita"—Four-Act Opera (Zandonai). Conductor: The Composer. Chorus Master: Consoli. Gianna Pederzini as Conchita. In the intervals: Talks; News. 10.30-11.0—Dance Music.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
Transmits at intervals from 6.0 a.m.
7.0 p.m.—See Monte Ceneri. 8.35—Reading. 9.0—Variety. 9.10—News. 9.20—Dresden String Quartet. Quartet in A minor (Graener). Quartet in D (Haydn). 10.20—Announcements.
10.30-12.0 m't—Light Orchestral. Conductor; Ganglberger. March (Achleitner). Overture, "Der Schätzmeister" (Ziehrer). Waltz, Blauer Flieder (Ganglberger). Potpourri (Hruby). Overture, "La Traviata" (Verdi). Idyll (Sieczynski). Frühlingsstimmen (Strauss). Potpourri, Servus Wien (Dostal). Die Kleine Kompagnie (Ganglberger). March (Hunyaczek).

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.); Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
Transmits at intervals from 5.30 a.m.
11.3 a.m.—Opera Records. 11.40—Farmers' Letterbox. 11.50-12.0 noon—News. 2.0—Economics. 2.15—Station Orchestra. Conductor: Górzyński. 3.0—Warsaw Review.
3.15—Letterbox.
3.30 (from Lwów)—Light Music. Seredyński Orchestra.
4.0—Story.
4.15—Marie Dzikowa (Songs), Turel (Pfte.). Three Songs (Wolf). Pfte. (a) Sarabande (Rameau-Godowsky), (b) Liebesleid (Rachmaninov-Kreisler). Songs (Brahms, Schumann). Pfte.: (a) Sonatina (Turel), (b) Polish Rhapsody (Turel).
4.50—Monologue. 5.0—Topical.
5.10 (from Torun)—Sports. 5.20—Announcements. 5.50—Topical. 6.0—Discussion.
6.20 (from Poznań)—"Hunting"—Musical Sequence (Roy). Village Band. Male Voice Choir and Others.
7.0 (from Poznań)—Report: Polish Choirs at the International Congress of Church Music at Frankfurt-am-Main.
7.10—Chamber Orchestra from the Conservatoire. Conductor: Mierzejewski. Jarzebski (Violin) and Snieckowski (Oboe). Sixteenth Century English Suite (arr. Rabaud). Oboe Concerto (Telemann). Violin Concerto in C (Haydn). Suite montagnarde (Ekier); at 7.45: News and Topical.
8.40—Poznań-Warsaw Exchange Programme. Part I from Poznań: Gogojewska (Mezzo-Soprano), Gizejewski (Violin) and Male Voice Choir. Address. Two Pieces (Walek-Walewski), for Mezzo-Soprano, Violin and Male Voice Choir. Part II, from Warsaw: Military Band. March (Osada). Fantasia on Mountain Airs (Czapski). Song and March (Osada).
9.30—Literary Programme. 9.45—Dance Music by the Station Orchestra. Conductor: Górzyński.

WEDNESDAY Nov. 4

4 p.m.

BERLIN, Records. 4.30—Report. **BEROMÜNSTER, MONTE CENERI** and **SOTTENS**. French Chamber Music. 4.10-Scheherazade (Rimsky-Korsakov). **BRESLAU**, Light Orchestral. **BUDAPEST (1)**, Talk.
FRANKFURT, Pfte., Orchestra. 4.30—"The German Family" (Biermer).
HILVERSUM (1,875 m.), Organ. 4.40—For Children.
KALUNDBORG, 4.50—Pfte. Duets. **KÖNIGSBERG**, 4.5—Sequence with Songs. 4.35—For Workers. 4.50—String Quartet in A (Schumann).
PARIS (PTT), Talks. 4.20—Songs. 4.30—Hawaiian Band. 4.45—Records.
RADIO-NORMANDIE, Concert. 4.45—For Children. **RADIO-PARIS**, Records. **ROME**, News. 4.15—Light Music.
TURIN, News. 4.15—Soprano, Violin. 4.55—Talk.

5 p.m.

ATHLONE, 5.30—Children's Hour.
BEROMÜNSTER, For Children. 5.30—Talk. **BRESLAU**, Light Orchestral. 5.50—Report. **BRUSSELS (1)**, For Women. 5.5—Radio Orchestra. **BRUSSELS (2)**, For Children. **BUCHAREST** and **RADIO-ROMANIA**, Notes. 5.15—Old French Music. Orchestra, Songs, Instrumental. **BUDAPEST (1)**, Talks. 5.45—'Cello.
COLOGNE, Pfte. Quintet in D flat (Wolf-Ferrari). 5.50—"Obadiah"—a Sailor's Yarn (Luserke).
DEUTSCHLANDSENDER, For Boys. 5.25—Records. 5.40—Talk.
FRANKFURT and **SOME GERMAN STATIONS**, Concert. Opera and Operetta Music.
HAMBURG, Theil Concert. Orchestra. Conductor: The Composer. Kobin (Violin). 5.45—Shipping. **HILVERSUM** (1,875 m.), For Children. 5.40—Talk; Report. **HILVERSUM** (301.5 m.). 5.10—V.A.R.A. Orchestra; Records.
KALUNDBORG, Pftes. (contd.). 5.20—For Women. 5.35—French. **KÖNIGSBERG**, Quartet (contd.). 5.20—News. 5.30—Cabaret.
MUNICH, Chamber Music.
PARIS (PTT), Pasdeloup Concert Orchestra. 5.30—Talks, Records.
RADIO-NORMANDIE, Light Music. **RADIO-PARIS**, Science. 5.15—Books. 5.30—Pasdeloup Concert Orchestra. Worms ('Cello).
SOTTENS, For Young People. 5.45—Talk: Beethoven's Third Symphony. **STRASBOURG**, 5.30—Radio Orchestra.
VIENNA, 5.10—Talks. 5.55—"The Flying Dutchman"—Opera (Wagner).

6 p.m.

ATHLONE, Children's Hour. 6.15—Selection, "Tannhäuser"—Opera (Wagner). 6.35—Irish News. 6.45—News.
BERLIN, "A Walk in the Zoo"—Songs and Verse (Mühlen); Music by Dressel. 6.45—Topical. **BEROMÜNSTER**, Notes; Markets. 6.15—Fröhlin (Songs to the Lute). 6.30—News. 6.40—American Topics. **BRESLAU**, Variety. 6.45—Topical. **BRNO** and **PRAGUE**, 6.20—Orchestra, Jazz Band, Moravian Vocal Quartet, Artists. **BRUSSELS (1)**, Talk. 6.15—Light Orchestral with Legrand and Maury. **BRUSSELS (2)**, Flor Peeters Music, Ria Lenssens (Songs), the Composer (Organ). 6.35—Sibelius Records. 6.45—Books. **BUCHAREST** and **RADIO-ROMANIA**, Old French Music (contd.). **BUDAPEST (1)**, 'Cello (contd.). 6.20—"Peer Gynt"—Drama (Ibsen).
COLOGNE, Chamber Music. 6.45—Snapshots.
DEUTSCHLANDSENDER, Dance Band, Sound News. 6.45—Topical.
FRANKFURT, Concert (contd.). 6.45—Topical. 6.55—Notes.
HAMBURG, "Gold from the Equator"—Play (Tittel); Music by Girnatis. 6.45—For Farmers. **HILVERSUM** (1,875 m.), Report. 6.40—Notes; Talk. **HILVERSUM** (301.5 m.), Orchestra (contd.). 6.40—Sports. 6.55—Choir; Records.
KALUNDBORG, News. 6.30—For Farmers. **KÖNIGSBERG**, Cabaret. 6.45—Topical.
LEIPZIG, Talk. 6.20—Pfte. Concerto in A (Schäfer). Rosl Schmidt. Leipzig Symphony Orchestra. 6.50—Topical.
MONTE CENERI, Records. 6.15—For Farmers. 6.30—Records. 6.45—News. **MUNICH**, Orchestra, Henny Wolff (Soprano).
OSLO, 6.55—Orchestra. (Mozart, Ravel, etc.)
PARIS (PTT), Pasdeloup Concert Orchestra. Worms ('Cello). 6.30—News. **POSTE PARISIEN**, 6.2—Jewish Talk. 6.17—Records, Exchange; at 6.42—Talk.
RADIO-NORMANDIE, Children's Corner. 6.40—Talk: Racing. **RADIO-PARIS**, For Children. 6.30—Lecture-Recital: German Influence on French Opera, with Mozart, Beethoven and Weber Music. **ROME**, Records: News, Talk (German). 6.20—News in Foreign Languages.
SOTTENS, Art. 6.15—Radio Magazine. 6.50—News. **STOCKHOLM**, Records. 6.15—News. 6.30—Talk. 6.55—Bellman Choir. **STRASBOURG**, Radio Orchestra. 6.30—News; Topical. **STUTTGART**, See Frankfurt. 6.45—Books.
TOULOUSE, Light Music. 6.50—News. **TURIN**, News in Foreign Languages.
VIENNA, "The Flying Dutchman" (contd.).
WARSAW, Poetry. 6.15—Records.

7 p.m.

ATHLONE, Here are our Treasures. 7.15—Station Orchestra. Louise Hutton and May Roberts (Song Duets).
BERLIN, News. 7.15—See Hamburg. 7.45—Orchestra. Pfte. **BEROMÜNSTER**, Radio Orchestra. 7.30—Sailor Accordion Music. 7.40—Sailors' Yarns. **BRESLAU**, News. 7.15—See Hamburg. 7.45—Patriotic Sequence with Songs of Four Centuries (Polloczek-Fische) **BRNO** and **PRAGUE**, Orchestra. (contd.). **BRUSSELS (1)**, Address: Notes. 7.30—News. **BRUSSELS (2)**, Records. 7.30—For Ex-Service Men. **BUCHAREST** and **RADIO-ROMANIA**, Educational. 7.20—Violin. 7.55—Topical (French). **BUDAPEST (1)** "Peer Gynt" (contd.)
COLOGNE, News. 7.15—See Hamburg. 7.45—Wagner Excerpts from the 1936 Bayreuth Festival. Conductor: Tietjen (Recorded).
DEUTSCHLANDSENDER. News. 7.15—Caecilia Hansen (Violin) and Stech (Pfte.). 7.45—Youth Programme (Recorded).
EIFFEL TOWER, News. 7.20—Foreign Affairs. 7.45—Press Review. 7.50—Home Affairs.
FRANKFURT, News. 7.15—See Hamburg. 7.45—Variety.
HAMBURG, News. 7.15—Youth Programme. 7.45—See Cologne. **HILVERSUM** (1,875 m.), Talk; Report. 7.40—News. 7.50—Harvest Thanksgiving Service. **HILVERSUM** (301.5 m.), Choir (contd.). 7.20—Talk; Notes. 7.55—Records.
KALUNDBORG, Chimes; Old Music—Radio Orchestra. (Purcell, Lully). 7.25—Records. 7.35—"The Orphanage"—Play (Haekkerup—Bergstedt). **KÖNIGSBERG**, News. 7.15—See Hamburg. 7.45—"To St. Hubert"—Hunting Songs, Tales and Humour.
LEIPZIG, News. 7.15—See Hamburg. 7.45—For Workers.
MONTE CENERI, 7.0—Close, "Ticino, Land of Artists." Talk. 7.5—Rosetta Pamoanini (Songs). 7.25—Talk. 7.35—Music and Poems. **MUNICH**, News. 7.15—See Hamburg. 7.45—"Autumn in the Algäu"—Humour, Song and Dance.
OSLO, Orchestra (contd.); at 7.30, Talk.
PARIS (PTT), News Review. 7.38—Pasdeloup Concert Orchestra. **POSTE PARISIEN**, 7.6—News. 7.37—Records.
RADIO-NORMANDIE. Concert. 7.40—News. **RADIO-PARIS**, Lecture-Recital (contd.). 7.30—Talk. 7.45—Poems (Romane). **ROME** and **TURIN**, 7.5—News. 7.30—Talk. 7.40—Report.
SOTTENS, Quintet (Lauber), with the Composer. 7.20—Talk. 7.35—Suisse romande Orchestra. Guest Conductor: Gui. **STOCKHOLM**, Choir (contd.). 7.15—A Motor Tour of North Sweden. **STRASBOURG**, Topical. 7.15—Records. 7.30—News (French, German). **STUTTGART**, News. 7.15—See Hamburg. 7.45—Schubert Cycle 1816-1819. Orchestra, Solo Voices, Instrumental.
TOULOUSE, Light Music. 7.55—News.
VIENNA, News; "The Flying Dutchman" (contd.).
WARSAW, Records. 7.35—Talk. 7.45—News.

8 p.m.

ATHLONE, Orchestra, Duets (contd.). 8.15—Talk. 8.30—T. Browne and H. Leeming (Flute Ducts). 8.45—Debate.
BERLIN, Orchestra, Pfte. (contd.). **BEROMÜNSTER**, Yarns (contd.). 8.10—Accordion. 8.15—Ivan Engel (Pfte.) and Radio Orchestra. **BRESLAU**, Sequence (contd.). **BRNO**—Talk. 8.15—Orchestra and Songs. **BRUSSELS (1)**, Symphony Orchestra. **BRUSSELS (2)**, Radio Orchestra. 8.45—Gérard Walschap reads. **BUCHAREST** and **RADIO-ROMANIA**, Topical (French). 8.10—Songs. 8.30—News. 8.45—Salon Orchestra. **BUDAPEST (1)**, "Peer Gynt" (contd.).
COLOGNE and **HAMBURG**, Wagner Excerpts (contd.).
DEUTSCHLANDSENDER, Youth Programme (contd.). 8.15—Records.
EIFFEL TOWER, Home Affairs. 8.30—Records.
FRANKFURT, Variety.
HILVERSUM (1,875 m.), Service (contd.). **HILVERSUM** (301.5 m.), Records. 8.25—Play.
KALUNDBORG, Play (contd.). 8.35—Record. 8.40—Discussion. **KÖNIGSBERG**, "To St. Hubert" (contd.).
LEIPZIG, Symphony Orchestra, Ensemble, Choir. Conductor: Blumer (Pfte.) and Others. **LILLE**, 8.30—Roubaix Conservatoire Symphony Orchestra. Marcelle Stach (Songs).
MONTE CENERI, Music and Poems (contd.). 8.15—Report. **MUNICH**, "Autumn in the Algäu" (contd.).
OSLO, Orchestra (contd.). 8.40—News.
PARIS (PTT), Talk. 8.15—Foreign Affairs. 8.23—Notes. 8.30—Hubeau (Pfte.). 8.45—Folk Songs by the "Do-Sol" Vocal Quintet. **POSTE PARISIEN**, 8.2—Paul Reboux. 8.17—Orchestra. 8.32—Sketch. **PRAGUE**, See Brno. 8.15—Orchestra, Songs.
RADIO-NORMANDIE, Records. 8.20—Talk. 8.30—Ventura's Collegians. **RADIO-PARIS**, "Le Fiancé de Margot"—Operetta (Planquette). 8.30—News. 8.45—"Kean"—Play (Dumas, arr. Colin). **ROME** and **TURIN**, "Beffare"—Play (Cerio). 8.30—Concert of Patriotic Music.
SOTTENS, Concert (contd.). **STOCKHOLM**, Stockholm Concert Orchestra. Conductor: Ansermet. Thibaud (Violin). (Saint-Saëns, Ravel). 8.45—News. **STRASBOURG**, News (German). 8.30—Strasbourg Municipal Orchestra. Wetzel (Pfte.). (Weber, Chopin, Rimsky-Korsakov.) **STUTTGART**, Schubert Cycle (contd.).
TOULOUSE, News. 8.10—Light Music. 8.55—News.
VIENNA, "The Flying Dutchman" (contd.).
WARSAW, Chopin Recital by Imre Ungar (Pfte.). 8.30—Songs, Guitar.

9 p.m.

ATHLONE, Variety.
BEROMÜNSTER, For Swiss Nationals Abroad. 9.30—News. 9.40—Notes. **BRESLAU**, News. 9.30—Band. **BRNO**, News. 9.15—Esperanto Programme. 9.45—See Prague. **BRUSSELS (1)**, Ballad (Grieg) by Godowsky (Pfte.). (Records). 9.15—Radio Orchestra. **BRUSSELS (2)**, César Franck Organ Records. 9.15—Symphony in D minor (Franck). Symphony Orchestra. Conductor: André. **BUCHAREST** and **RADIO-ROMANIA**, Orchestra (contd.). 9.45—News (French, German, Romanian). **BUDAPEST (1)**, News. 9.20—Salon Orchestra.
COLOGNE, BERLIN and **FRANKFURT**, News. 9.30—Light Music and Dance Music.
DEUTSCHLANDSENDER. News. 9.30—Divertimento (Mozart). 9.45—Weather.
EIFFEL TOWER, Records. 9.25—See Vienna.
HAMBURG, News. 9.30—Dance Band. **HILVERSUM** (1,875 m.), Service (contd.). 9.25—Records. 9.40—News; Chess. **HILVERSUM** (301.5 m.), Play. 9.10—The Bohemians. 9.40—News. 9.45—Mlle. de Lorme (Soprano), Jong (Organ).
KALUNDBORG, Discussion. 9.10—News. 9.25—Operetta Music. Radio Orchestra. 9.55—Dance Band. **KÖNIGSBERG**, News. 9.20—Talk. 9.40—Music from Cologne.
LEIPZIG, News. 9.20—Books. 9.30—Dance Band. **LILLE**, Orchestra, Songs (contd.).
MONTE CENERI, Report. **MUNICH**, News. 9.20—Talk. 9.45 Dance Band.
OSLO, Talk. 9.15—Reading. 9.45—Dance Records.
PARIS (PTT), Folk Songs (contd.). 9.15—Loewenguth Quartet, Songs, Clarinet, Pfte. **POSTE PARISIEN**, 9.2—Sketches; at 9.5—Talk. **PRAGUE**, News. 9.15—See Brno. 9.45—French News.
RADIO-NORMANDIE, Concert. **RADIO-PARIS**, Play (contd.). **ROME** and **TURIN**, Concert (contd.)
SOTTENS, Concert (contd.). **STOCKHOLM**, Dance Band. **STRASBOURG**, Orchestra, Pfte. (contd.). **STUTTGART**, News. 9.30—Bella Songs. 9.45—Records.
TOULOUSE, News. 9.10—Fantasy. 9.45—Paris Programme.
VIENNA, "The Flying Dutchman" (contd.). 9.15—News. 9.25—New Wolf Songs by Patzak (Tenor).
WARSAW, Orchestra, Songs, Violin.

10 p.m.

ATHLONE, Variety. 10.30—News, Light Music.
BRESLAU, Band. **BRUSSELS (1)**, News. 10.10—Dance Band. **BRUSSELS (2)**, News. 10.10—Dance Records. **BUDAPEST (1)**, Records.
COLOGNE and **MOST GERMAN STATIONS**, Light Music and Dance Music.
DEUTSCHLANDSENDER, Dance Music and Light Music.
EIFFEL TOWER, see Vienna.
HAMBURG, Dance Band. **HILVERSUM** (1,875 m.), Records. **HILVERSUM** (301.5 m.), Soprano, Organ (contd.). 10.10—Dance Band. 10.40—Talk.
KALUNDBORG, Dance Band.
LEIPZIG, Dance Band. **LILLE**, Orchestra, Songs (contd.). 10.30—News.
MUNICH, Dance Band, etc.
OSLO, Dance Records.
PARIS (PTT), Quartet (contd.). 10.30—News. **POSTE PARISIEN**, Orchestra. 10.30—Records.
RADIO-NORMANDIE, Concert. **RADIO-PARIS**, Play (contd.). 10.45—Dance Music. **ROME** and **TURIN**, News. 10.15—Dance Music.
STRASBOURG, Orchestra, Pfte. (contd.). 10.30—News. **STUTTGART**, Records.
TOULOUSE, Paris Programme. 10.15—Light Music. 10.55—News.
VIENNA, 10.5—Notes. 10.15—Records; Light Music and Dance Music.
WARSAW, Dance Records.

11 p.m.

BUDAPEST (1), 11.5—News.
FRANKFURT and **STUTTGART**, German Operetta Music. Deutschlandsender Station Choir, Orchestra and Singers (Recorded).
HILVERSUM (1,875 m.), Bible Reading. **HILVERSUM** (301.5 m.), Talk. 11.10—Records.
KALUNDBORG, Chimes, Dance Band.
PARIS (PTT), U.S.A. Bulletin.
RADIO-NORMANDIE, Dance Music. 11.30—From the Cabane Normande. **RADIO-PARIS**, Dance Music. 11.15—Light Music. Robert Orchestra.
STRASBOURG, News (German).
TOULOUSE, Light Music. 11.55—News.
VIENNA, Schrammel Music, Alfred Strauss Trio, etc.

12 midnight

FRANKFURT and **STUTTGART**, German Operetta Music (contd.).
RADIO-NORMANDIE, Dance Music. **RADIO-PARIS**, Light Music.
TOULOUSE, 12.5—Light Music. 12.30—Notes.

PRINCIPAL EVENTS

SYMPHONY CONCERTS
5.0 Hamburg: Fritz Theil programme.
7.35 Sottens: Conductor, Vittorio Gui.
7.45 Stuttgart: Schubert.
8.0 Brussels 1, 2 (9.15): Belgian music, Symphony (Franck).
8.0 Stockholm: Ansermet, Jacques Thibaud.
8.15 National: Mengelberg, Myra Hess (pfte.), Paul Beard (violin).
8.30 Strasbourg: Weber, Chopin, Rimsky-Korsakov.

LIGHT CONCERTS
12.15 Radio-Paris: Orchestral, vocal.
1.50 Kalundborg: Preil's Ensemble.
3.0 Deutschlandsender: Popular music.
5.0 Frankfurt, etc.: Opera and operetta prog.
6.55 Oslo: Popular orchestral.
7.15 Athlone: Popular orchestral.
7.45 Munich: Autumn in the Bavarian Alps.
8.0 Leipzig: Light symphonic music.
8.30 Italian Stations: Patriotic programme.
9.0 Warsaw: Orchestra, song, violin.
9.20 Budapest 1: Salon orchestra.
9.25 Kalundborg: Operetta music.
9.30 Cologne, etc.: Serenade and dances.
11.0 Frankfurt, Stuttgart: From new operettas.
11.0 Vienna: Schrammel music.
11.15 Radio-Paris: Robert Orchestra.

OPERA
5.55 Vienna: "The Flying Dutchman" (from the Opera).

OPERETTA
8.0 Radio-Paris: "Le fiancé de Margot" (Planquette).

CHAMBER MUSIC
4.15 Warsaw: Oboe, bassoon, pfte.
5.0 Cologne: Quintet (Wolf-Ferrari).
7.0 Sottens: Quintet (Lauber).
9.15 Paris (PTT): Quartet, clarinet, song, pfte.
9.30 Deutschlandsender: Mozart.

RECITALS
8.0 Regional: Schubert songs.
8.0 Warsaw: Chopin.
8.15 Beromünster: Ivan Engel (pfte.).
9.25 Vienna, Eiffel Tower: New Wolf songs.
9.45 Hilversum (1,875 m.): Soprano, organ.

PLAYS
6.20 Budapest 1: "Peer Gynt" (Ibsen).
8.45 Radio-Paris: "Kean" (Dumas Père).

LAST NEWS BULLETINS, See Monday

DANCE MUSIC
6.0 Breslau, Deutschlandsender; 9.0, Stockholm; 9.30, Hamburg, Leipzig; 9.45, Oslo; 9.55, Kalundborg; 10.0, Deutschlandsender, Warsaw; 10.10; Brussels 1 and 2, Hilversum (1,875 m.), 10.15, Rome; 10.25, Regional; 10.45, Radio-Paris; 11.0, Radio-Normandie; 11.15, National.

NATIONAL

For Time Signals, see Monday

10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—Cinema Organ, Sidney Torch.
11.15—Gramophone Records.
11.30—For the Schools: French for Older Pupils.
11.45—BBC Northern Ireland Orchestra; May Devitt (Soprano).
12.30 p.m.—Dance Records.
1.0—Theatre Orchestra.
2.0 (ex. Scottish)—Herring Bulletin.
2.0 (Scottish)—See Regional.
2.5 (ex. Scottish)—For the Schools: History; 2.30—Biology.
2.50—The Friary (Guildford) Band.
3.30—Kathleen Dunn Davies (Pfte.).
4.0—Evensong from St. Paul's Cathedral.
4.50—The John Macarthur Quintet.
5.15—BBC Dance Orchestra.
6.0—The First News.
6.20—La Parure Féminine—Madame de Bioncourt.
6.40—Claude Hulbert and Bobbie Comber in "Bigger Business," by H. E. Kavanagh.
7.0—The Alfredo Campoli Trio.
7.30—Dance Music.
8.15—BBC Symphony Concert from Queen's Hall, London. Paul Beard (Violin), Myra Hess (Pfte.), with the BBC Symphony Orchestra, conducted by Willem Mengelberg. Concerto grosso in A minor (Vivaldi); Concerto No. 2 (Brahms); Ein Heldenleben (Richard Strauss).
9.20—The Third News.
9.40—Concert (contd.).
10.25—The Leslie Bridgewater Quintet.
11.15—Jack Chapman and his Band.
11.30—Dance Records.

REGIONAL

For Time Signals, see Monday

10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—Gramophone Records.
11.30—Serge Krish and his Orchestra.
12.30 p.m.—Troise and his Mandoliers.
1.15—The Prague String Quartet—Dvořák, Mozart, Schulhoff.
2.0 (ex. Scottish)—BBC Welsh Orchestra; Blodwen Caerleon (Contralto).
2.0 (Scottish)—For the Schools; 2.5—History, 2.30—Biology.
3.0—Empire Exchange.
3.15—Gramophone Records.
4.0—The Wynford Reynolds Octet.
4.45—Gramophone Records.
5.15—The Children's Hour.
6.0 (ex. Western, N. Ireland, Scottish)—BBC Northern Orchestra.
6.0 (Western)—The Cardiff Wind Quintet.
6.0 (Scottish)—BBC Scottish Orchestra.
6.0 (N. Ireland)—Dance Music.
6.30 (N. Ireland)—The Philip Whiteway String Quartet.
6.30 (Western)—Celebrities of the West—Kenneth Ellis (Bass).
6.45 (Scottish)—With the Old Folk.
7.0—The Second News.
7.20—Regional Announcements.
7.30—The World Goes By—A collection of poems and personalities who will broadcast views and information on life, London, the country and the world.
8.0 (ex. Western, Northern, N. Ireland) — Schubert — 4. George Parker (Baritone) Songs: Am Flusse, Seufzer, An den Frühling, Augenlied, Nachtgesang, Schweizerlied, Liebhaber in allen Gestalten.
8.0 (Western)—Billy Merrin and his Commanders.
8.0 (Northern)—Hymn Singing Festival—The Darlington Sunday Schools Choir, conducted by Cyril Winn.
8.0 (N. Ireland)—Saturday Night at the Ulster Hall.
8.15 (ex. Western, Scottish)—"Kick Off"—a Football Play with Music.
8.15 (Scottish)—Scottish Dances.
8.20 (Western)—The Western Municipal Orchestra; Dorothy Clark (Contralto).
8.45 (Scottish)—Glasgow Literary Club Semi-Jubilee Dinner; After-Dinner Speech by Ian Hay (Major Beith).
9.0 (Regional, N. Ireland)—BBC Theatre Orchestra; Arthur Fear (Bass-baritone).
9.0 (Midland)—"The House Next Door"—Moore Raymond.
9.0 (Western)—A discussion in Welsh on present-day problems dealing with the home.
9.0 (Northern)—A Year in the Arctic.
9.0 (Scottish)—Music from the Scottish Past.
9.15 (Midland)—Jack Wilson and his Versatile Five.
9.15 (Northern)—Variety.
9.30 (Western)—Welsh Airs and Dances.
9.30 (Scottish)—Bees in the Bonnet, by "The Gomeril."
10.0—News Summary.
10.25 (Midland 10.45)—Dance Music.
10.25 (Midland)—Reading.
11.30—Late News Summary.
11.40—Records.

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).

1.30-2.30 p.m.—Time; Weather; Stocks; Request Records. 5.30—Children's Hour: William Tell, adapted for Children by Eillen Knowles and Company. 6.15—Selection, "Tannhäuser"—Opera (Wagner). 6.35—Irish News Feature. 6.45—Weather; Stock; News; Time. 7.0—"Here are our Treasures"—Catholic Central Library, by the Rev. Stephen Brown, S.J.
7.15—Popular Music by the Station Orchestra. Louise Hutton and May Roberts (Song Duets). Woodland Pictures (Fletcher). Tales from the Vienna Woods (Strauss). Woodland Sketches (McDowell).
8.15—Talk by Herbert Morrison—a Visitor to Dublin. 8.30—T. Browne and H. Leeming (Flute Duets). 8.45—Is Miss Ireland being educated on the right lines?—Debate between Hernadette Plunkett and Mrs. M. Kettle.
9.0—Variety.
10.30—What happened to-day: Light Music. 11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.); 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral; at 12.0 noon—Midday Echoes. 1.0 p.m.—News. 1.15—Records: Viennese Music. 2.0—Exchange; Markets. 3.30—Books. 3.45—Records. 4.30—Winter Relief Report.
5.0—See Frankfurt.
6.0—"A Walk in the Zoo"—Songs and Verse (Mühlen); Music by Dressel. 6.45—Topical. 7.0—News.
7.15—See Hamburg.
7.45—Light Orchestral. Conductor: Steiner. Haentzschel (Pfte.). 9.0—News.
9.30-11.0—See Cologne.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).

5.30-5.50 a.m.—Ski-ing. 9.20-9.50—For Schools.
11.0 a.m. - 12.45 p.m.—See Monte Ceneri. At 11.29: Time; News.
3.0-5.30—From Berne.
3.0—For Women.
3.30—French Chamber Music by Jaunet (Flute), Tüller (Tenor), Hegi (Baritone) and Girsberger (Pfte.).
4.10—Orchestra: Scheherazade (Rimsky-Korsakov). 5.0—For Children. 5.30—Talk. 6.0—Announcements; Markets. 6.15—Fröhlin (Songs to the Lute). 6.30—News. 6.40 (from Basle)—American Topics. 7.0—Radio Orchestra: Conductor: Bernhard.
7.30-9.30—From Basle.
7.30—Sailor Music by Kohler (Accordion). 7.40—Sailors' Yarns. 8.10—Accordion.
8.15—Ivan Engel (Pfte.) and the Radio Orchestra. Conductor: Bernhard.
9.0—For Swiss Nationals Abroad.
9.30—News. 9.40 (from Basle)—Tourist Notes.

BRESLAU (Germany)

950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).

Transmits at intervals from 4.0 a.m.
11.0 a.m.—Light Orchestral; at 12.0 noon—News. 1.0 p.m.—News.
1.15—Variety from Deutschlandsender. 2.0—For Farmers. 3.0—For Children. 3.30—Books. 3.40—"Langemarck" (Hartmann). 4.0—Light Orchestral. 5.50—Report: A Sheep-Shearing.
6.0—Variety. Station Dance Band, etc. 6.45—Topical. 7.0—News.
7.15—See Hamburg.
7.45—Patriotic Sequence with Songs of Four Centuries (Polloczek-Fritsche). Station Choir and Dramatic Ensemble, and Hitler Youth Radio Players. 9.0—News.
9.30-11.0 (from Gleiwitz)—"Glück-Auf" Band.

BRNO (Czechoslovakia)

922 kc/s (325.4 m.); 32 kW.
Transmits at intervals from 5.15 a.m.
4.40 p.m.—German Transmission. Talk for the 125th Anniversary of K. H. Macha's Birth; H. Wagner, Rösner and Chiari Music by Relly Jungschaffer (Soprano) and Erika Dostal (Pfte.). 5.15—News. 5.20—Tales. 5.35—For Workers. 5.45-6.20—See Prague. 6.20—Station Orchestra, Conductor: Plichta. Jazz Band; Moravian Vocal Quartet and Others. 8.0—Medical Talk. 8.15—See Prague. 9.0—News.
9.15—Esperanto Programme. Talk; Scherzo from the Triumph Symphony (Smetana). "The Accident at Magnuszov"—Play (Braun). Slav Dance (Dvořák).
9.45-10.0—See Prague.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.); 15 kW.

6.37-9.0 a.m.—Records; News; Gym. 12.0 noon—Records. 12.30 p.m.—Brenders Dance Band. 1.0—News. 1.10—Salon Orchestra. Conductor: Féron. 1.30—Records: Light Music. 2.0-3.15—Art Notes: Educational Programme.

The Composer Edgar Tinel (1854–1912) whose music forms part of the Belgian programme at 8 p.m. (Brussels No. 1)

4.55 — Announcements. 5.0 — For Women.
5.5—Radio Orchestra. Conductor: Douliez. Rustic Revels (Fletcher). Divertissement on five Old English Dances (Paumgartner). Suite grotesque (De Brabander). Overture, "Le Dieu et la Bayadère" (Auber). Excerpts, "Gretna Green" (Guiraud). Ballet, "Romeo and Juliet" (Gounod).
6.0—Talk: Octave Pirmez. 6.15—Light Orchestral with Gilberte Legrand and Maury. 7.0—Protestant Address. 7.15—Theatre Notes; Sports; Music Review. 7.30—News.
8.0—Symphony Orchestra. Conductor: André. Overture, "Katharina" (Tinel). Symphonic Poem, La lutte au XVIe siècle (Van den Eeden). Excerpt, "Le Mort" (Dubois). Fantasy on Angevin Airs (Lekeu).
9.0—Ballad (Grieg) by Godowsky (Pfte.) on Records.
9.15—Radio Orchestra. Conductor: Douliez. Egyptian March (Strauss). Dances (Lanner). Mascarade (Lacôme). Excerpts, "Tsar and Carpenter" (Lortzing). 10.0—News.
10.10-11.0—Brenders Dance Band.

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.

6.37-9.0 a.m.—Records; Gym; News. 12.0 noon—Records. 12.30 p.m.—Weather. 12.31—Salon Orchestra. Conductor: Féron. 1.0—News. 1.10—Brenders Dance Band. 1.30—Records. 2.0-2.3—Shipping.
4.40—Announcements. 4.45—Talk. 5.0—For Children.
6.0—Flor Peeters Recital by Ria Lenssens (Songs) and the Composer (Organ). Organ Choral on a Mediæval Flemish Song: Een kint gheboren in Bethlehem. Poem for Organ and Voice: Speculum vitae (Text by Simons). Organ Choral with Variations on an Old Flemish Song: Heer Jezus heeft een hofken.
6.35—Sibelius Records. 6.45—Books. 7.0—Records (Borodin, Stravinsky).
7.30—For Ex-Service Men.
8.0—Radio Orchestra. Conductor: Douliez. Overture, "Martha" (Flotow). Fajardo (Bemers). Liebesleid (Kreisler). Frühlingstraum (Strauss). Russian Rhapsody (Gretchaninov). Legends (Dvořák). Excerpts, "Fatinitza" (Suppé). Potpourri, Contrasts (Robrecht).
8.45—Gérard Walschap reads.
9.0—César Franck Organ Records. Pièce héroïque. Prelude, Fugue and Variations.
9.15—Symphony in D minor (Franck), by the Symphony Orchestra. Conductor: André.
10.0—News. 10.10-11.0—Dance Records.

BUCHAREST (Romania)

823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov) 160 kc/s (1,875 m.).

Transmits at intervals from 4.30 a.m.
4.0 p.m.—Records: Operetta Potpourris. 5.0—Time; Weather; Markets; Topical.
5.15—Old French Music. Radio Orchestra. Conductor: Rogalski. Rosl Baumann-Radulescu (Songs). Radulescu (Harpsichord). Jianu (Flute). Fotino ('Cello). Introduction. Les gieux de Robin and Marion. Popular Airs (arr. Baussnern). Flute, 'Cello, and Harpsichord: Sonata (Leclair). Sonata for Flute (Loeillet). Piece for Harpsichord (Couperin). Orchestra: Suite (Rameau). Suite (Grétry).
7.0—Educational Programme.
7.20—Sarvas (Violin). Sonata in D (Nardini). Clair de lune (Debussy). Tambourin (Leclair). Spanish Dance (Falla-Kreisler). 7.55—Topical (French).
8.10—Constance Hameiu (Songs). Air, "La Gioconda" (Ponchielli). Still wie die Nacht (Bohm). Air, "Mitrane" (Rossi). Cradle Song (Borgoven). 8.30—News; Sports.
8.45—Light Music—Radio Salon Orchestra. Conductor: Teodoru.

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.); 120 kW.
Transmits at intervals from 5.45 a.m.
11.0 a.m.—Chimes. 11.5—Police Band. 12.30 p.m.—Greizinger (Pfte.) and Ferike Bertok (Songs). 3.15—For Students. 4.0—Hygiene Talk. 5.15—Talk. 5.45—Regina Schein ('Cello).
6.20—"Peer Gynt"—Drama (Ibsen). 9.0—News. 9.20—Weidinger Salon Orchestra. 10.0—Records. 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.); 18 kW.
5.45 p.m.—Italian Lesson. 6.25—Sebö (Songs). 7.5—Cymbalon. 7.35—News. 8.0—Station Orchestra.

COLOGNE (Germany)

658 kc/s (455.9 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Band. 12.0 noon—News. 12.15 p.m.—Light Orchestral; at 1.0—News. 2.0—For Children. 2.45—Economics. 3.0—Genealogy. 3.30—Engel Band. 4.45—Talk: Gandhi.
5.0—Pfte. Quintet in D flat (Wolf-Ferrari). 5.30 — "Obadiah" — a Sailor's Yarn (Luserke), told by the Author. 6.0—Chamber Music. 6.45—Snapshots. 7.0—News.
7.15—See Hamburg.
7.45—Wagner Concert—Excerpts from the 1936 Bayreuth Festival. Conductor: Tietjen (Recorded). Scenes from "Siegfried," "The Valkyrie," and "Lohengrin." 9.0—Time; News.
9.30 - 11.0 — Serenade and Dance Music, with the Six Merry Singers.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.); 60 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.-12.45 p.m.—See Königsberg. 12.45—News.
1.0—Variety. 2.0—Exchange; Programmes. 2.15—Records. 2.45—Books. 3.0—Dobrindt Band. Part I: Light Classical. Part II: The Five Strausses; at 3.50: Topical. 5.0—Play for Boys. 5.25—Organ Records. 5.40—Physical Training. 6.0—Kaiser Dance Band. In the interval: Sound News. 6.45—Topical. 7.0—Motto; News.
7.15—Caecilia Hansén (Violin), Stech (Pfte.). Concerto in A minor (Vivaldi). Prelude and Fugue for Solo Violin (Bach). Dance (Sarasate).
7.45—Youth Programme.—Youth at the Plough (Recorded). 8.15—Records: Bavarian and Swabian Music. 9.0—News.
9.30—Divertimento for two Clarinets and Bassoon (Mozart). 9.45—Weather.
10.0-11.0—Dance Music and Light Music by the Roosz Dance Band.

WEDNESDAY (November 4)

FRANKFURT (Germany)

1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg, and Trier, 1,195 kc/s (251 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral. 1.0 p.m.—News.
1.10—Wagner Records of Lorenz (Tenor) and Orchestra. 2.0—Economics. 2.15—Topical; Reading.
3.0 (from Freiburg)—Hirtler (Pfte.) and Orchestra. 4.30—"The German Family" (Biermer).
5.0—Opera and operetta music. Choir and Orchestra, Hauck Band, Tenor, Bass. 6.45 — Topical. 6.55 — Announcements. 7.0—News.
7.15—See Hamburg.
7.45—"Over the South Atlantic aboard the Zeppelin"—Variety (arr. v. d. Becke). 9.0—Time; News.
9.30—See Cologne.
11.0 p.m.-1.0 a.m. (Thursday)—German Operetta Excerpts by Deutschlandsender Station Choir, Orchestra, and Singers. Conductor: Marszalek (Recorded). Excerpts, "Die Vielgeliebte" (Künneke), "Wenn Liebe befiehlt" (Snaga), "Adrienne" (Goetze).

HAMBURG (Germany)

904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg, and Stettin, 1,330 kc/s (225.6 m.).

Transmits at intervals from 5.15 a.m
11.10 a.m.—Light Orchestral. 1.0 p.m.—News. 1.20—Music. 2.0—Exchange. 2.15—Shipping.
2.30—Rondos (Beethoven) by Stóterau (Pfte.).
3.0—See Deutschlandsender. 3.50—Talk. 4.10—Handwork Songs. 4.30—Sequence for Women (Heuer).
5.0—Theil Concert, the Composer conducting, with Kobin (Violin). Lebenskampf. Violin Concerto in D. 5.45—Shipping.
6.0—"Gold from the Equator"—Play (Tittel); Music by Girnatis. 6.45—For Farmers. 7.0—News.
7.15—For all German Stations: Youth Programme—Youth at the Plough.
7.45—See Cologne. 9.0—News.
9.30-11.0—Dance Band.

HILVERSUM (1,875 m.) (Holland)

160 kc/s; 10 kW until 2.40 p.m.; 100 kW from 2.40 p.m.
N.C.R.V. Programme.
7.40-9.10 a.m.—Bible Reading: Meditation; Records. 10.10—Service. 10.40—Couperus (Bass) and Keereweer (Pfte.). 11.40—Announcements; Records. 12.10 p.m.—Dutch Harp Quartet; in the intervals: Records. 1.40—Records. 2.40-3.25—Mlle. Aerts (Pfte.) and Mlle. Kalff (Violin). 3.40—Visser (Organ). 4.40—For Children. 5.40—Talk; Inland Navigation Report. 6.40—Announcements; Talk; Report. 7.40—News. 7.50—Harvest Thanksgiving Service; Hoogeveen (Organ). 9.25—Records. 9.40—News; Chess. 10.0-11.10—Records; Bible Reading.

HILVERSUM (301.5 m.) (Holland)

995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
V.A.R.A. Programme.
7.40 a.m.—Records. 9.10—Gastronomical Talk.
9.40—V.P.R.O. Religious Programme. 9.55—Records; Talk. 11.10—Talk. 11.40—Records. 11.55—De Flierefluiters and Songs. Conductor: v. d. Horst. 12.40-1.25 p.m.—The Melody Circle. Conductor: Wins. 1.40—Jong (Organ). 2.10—For Women. 2.40—For Children.
5.10—V.A.R.A. Orchestra. Conductor: Lohoff. Records in the interval. 6.40—Sports Notes. 6.55—Choir. Conductor: Tiggers. Records in the interval. 7.20—Talk; Announcements. 7.55—Records. 8.25—Play. 9.10—The "Bohemians." Conductor: v. d. Horst. 9.40—News. 9.45—Mlle. T. de Lorme (Soprano) and Jong (Organ).
10.10—The Ramblers Dance Band. Conductor: Masman. 10.40—Talk. 11.10-11.40—Records.

KALUNDBORG (Denmark)

240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).
Transmits at intervals from 6.0 a.m.
11.0 a.m.-1.0 p.m.—Warny String Ensemble. 1.50—Preil's Ensemble; at 2.40—Swedish Reading. 3.50—

WEDNESDAY (November 4)

Wireless Notes. 4.0—Talk: Twenty Years of Danish Football. 4.40—Exchange; Markets. 4.50—Fischer and Alsfelt (Two Pftes.). 5.15—Weather. 5.20—For Mothers. 5.35—French Lesson. 6.0—News; Doings of Danes Abroad. 6.30—For Farmers.
7.0—Old Music. Radio Orchestra. Conductor: Tuxen. Suite, "Amphitryon" (Purcell). Excerpts, "Armide et Renaud" (Lully).
7.25—Records: "Carmen" Fantasia (Bizet-Sarasate) by Marteau (Violin).
7.35—"The Orphanage"—Play (Haekkerup-Bergstedt). 8.35—Record.
8.40—Discussion: Land Work. 9.10—News.
9.25—Operetta Music. Radio Orchestra. Conductor: Tuxen. Overture, "Gipsy Love" (Lehár). Selection, "No, no, Nanette" (Youmans) and "Tip-toes" (Gershwin).
9.55-11.30—Petersen Dance Band; at 11.0—Chimes.

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)

1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.)
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral. 1.0 p.m. News. 1.10—Reading. 1.20—Unfamiliar Light Classical Music. 2.0—For Housewives. 2.10—For Girls. 2.35—Records; at 3.15—Riding.
4.5—"Matthew and Herman Claudius"—Sequence with Choral Songs. 4.35—For Workers.
4.50—String Quartet in A (Schumann) by the Peter Quartet. 5.20—Local News.
5.30—"Collegium lusticum"—Cabaret (Witt); Music by Neumann. 6.45—Topical. 7.0—News.
7.15—See Hamburg.
7.45—"To St. Hubert"—Hunting Songs, Tales, and Humour, with the Station Choir, etc. 9.0—News. 9.20—Talk: Bismarck.
9.40-11.0—Music from Cologne.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Band. 12.0 noon—News. 12.15 p.m.—Orchestra; Flute. 1.0—News.
1.15—Variety from Deutschlandsender. 2.0—Science and Progress. 2.10—Art Notes. 3.0—Records. 4.0—Economics. 4.10—Talk: The Pekin Theatre. 4.30—Music. 4.45—Talk.
5.0—See Frankfurt. 6.0—Talk: Egger-Lienz.
6.20—Pfte. Concerto in A (Schäfer) by Rosl Schmidt and the Leipzig Symphony Orchestra, Conductor: Weisbach. 6.50—Topical. 7.0—News. 7.15—See Hamburg. 7.45—For Workers.
8.0—Leipzig Symphony Orchestra and Chamber Music Ensemble, Conductor: Blumer (Pfte.). Station Choir, Henriette Lehne (Contralto), Göpelt (Bass), Sammler (Pfte.). 9.0—News. 9.20—Books.
9.30-11.0—Dance Band.

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
8.30 p.m.—Roubaix Conservatoire Symphony Orchestra. Conductor: Bousquet. Marcelle Stach (Songs). Overture, "The Mastersingers" (Wagner). "La Flûte de Jade" (Marguerite Canal) for Voice and Orchestra. Conductor: The Composer. Excerpt, "Redemption" (Franck). Ballet, "Mother Goose" (Ravel). Le Cantique des Cantiques (Marguerite Canal) for Voice and Orchestra. Conductor: The Composer. Bourrée fantasque (Chabrier).
10.30—News.

LYONS (PTT) (France)

648 kc/s (463 m.); 100 kW.
Transmits at intervals from 6.50 a.m.
8.30 p.m.—"Chantecler"—Play (Rostand), with Louis Seigner of the Odéon, Paris. 10.30-11.0—News.

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.); 15 kW.
Transmits at intervals from 11.0 a.m.
11.0 a.m.—Records: Swiss Marches. 11.10—Serenades by the Three Minstrels. 11.30—News. 11.40—Opera-Bouffe Music. 12.45-12.50 p.m.—Financial Report.
3.30-5.0—See Beromünster. 5.59—Announcements; Records. 6.15—For Farmers. 6.30—Records. 6.45—News.
7.0 till Close Down: "Ticino, Land of Artists." 7.0—Talk by Enrico Celio.
7.5—Rosetta Pampanini (Songs). Arias, "Tosca" (Puccini), "Andrea Chénier" (Giordano), "La Wally" (Catalani), "Manon" (Puccini), and "Mephistopheles" (Boito).
7.25—Talk by Benedetto Croce.
7.35—Music and Poems by Composers and Poets who visited the Ticino. Radio Orchestra—Conductor: Casella; Giulietta De Riso and Guido Calgari (Recitations). Prelude to Act IV, "La Wally" (Catalani). Selection, "I Pagliacci" (Leoncavallo). Intermezzo, "Manon Lescaut" (Puccini). Intermezzo, "Tiefland" (d'Albert). Four Episodes for Chamber Orchestra (Bloch). In the intervals, Poems by Manzoni, Bertacchi, Fogazzaro, Chiesa and Bacchelli.
8.15-9.15—A Radio Report.

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Orchestra from Augsburg. 12.0 noon—News. 12.15 p.m.—Light Orchestral. 12.45—News.
1.0-2.0—See Deutschlandsender. 2.40—For Girls. 3.0—For Farmers. 3.10—Hitler Youth.
3.30—Vocal and Instrumental. 4.30 Talk: Egger-Lienz. 4.50—For Farmers.
5.0 (from Nürnberg)—Station Quintet, Double Quartet, Recorder Quartet, Pfte., Tenor.
6.0—Concert. Station Orchestra, Conductor: Winter, Henny Wolff (Soprano) (Mozart, etc.). 7.0—News.
7.15—See Hamburg.
7.45—"Autumn in the Algäu"—Humour, Song and Dance in Oberstdorf, and Accordion Music in Immenstadt. 9.0—Time: News. 9.20—Talk: German Problems.
9.45-11.0—Station Dance Band, etc.

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trøndelag, 629 kc/s; 476.9 metres.
Transmits at intervals from 10.40 a.m.
6.55 p.m.—Station Orchestra. Conductor: Kramm. Eine kleine Nachtmusik (Mozart). Le tombeau de Couperin (Ravel). España (Chabrier). Prelude and Death of Isolda, "Tristan and Isolda" (Wagner). Suite (Gjerström). Three Norwegian Melodies (Grieg); at 7.30-7.55: Talk from the University.
8.40—News. 9.0—Topical. 9.15—Reading. 9.45-10.30—Dance Records

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
7.0 p.m.—News. 7.10—Racing. 7.20—Foreign Affairs. 7.45—Press Review. 7.50—Home Affairs. 8.30—Records.
9.25-10.15—See Vienna.

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
Transmits at intervals from 7.10 a.m.
12.0 noon—Exchange. 12.5 p.m.—Records; at 12.35: Exchange. 1.19—Grichine. 1.35-2.0—Records: Light Music. 2.0, 3.45, and 4.35—Exchange. 6.0—Call. 6.2—Jewish Talk. 6.17—Records. 6.30—Exchange. 6.35—Records: Light Music. 6.42—Topical. 6.49—Records. 7.6—News. 7.30—Aeronautics. 7.37—Song Records. 7.52—Records. 8.2—Paul Reboux. 8.17—Adison Orchestra. 8.32—Sketch.
9.2—Lightning Sketches. 9.5—Talk. 9.20—Mireille. 10.0—"Grand Jeu" Orchestra. 10.30-11.0—Records: Light Music.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m.
2.30 p.m.—Programme for the Blind. Cabaret; Orchestra; Pfte.; Songs; News; Talk; 'Cello; "La princesse jaune"—One-Act Opera (Saint-Saëns).
4.0—Talk: Peasant Art. 4.10—Talk: Anthropology.
4.20—Andrée Grialys (Songs). 4.30—Jacovacci Hawaiian Band. 4.45—Records.
5.0—Pasdeloup Concert Orchestra. Conductor: Cloez. Overture and Ballet, "Idomeneo" (Mozart).
5.30—Talk: Bergson. 5.40—Records. 5.55—Talk.
6.0—Pasdeloup Concert Orchestra (contd.); Worms ('Cello). Overture, "Castor and Pollux" (Rameau). Pavane (Fauré). Hebrew Music for 'Cello: (a) Meditation (Dick), (b) Dance (Dick), (c) Kol Nidrei (Bruch). 6.30—News; Review.
7.38—Pasdeloup Concert Orchestra (contd.). Overture, "Mignon" (Thomas). Prayer (Boëllmann). Gothic Minuet (Boëllmann). Mazurka in D (Chopin).
8.0—Tourist Talk. 8.15—Foreign Affairs. 8.23—Literary Notes.
8.30—Hubeau (Pfte.). Excerpts, "L'homme marche" (Hubeau). Scherzetto (Gallon). Sicilienne (Roussel). Rondo (Roussel).
8.45—Folk Songs of France, Haiti, Mexico, The Ukraine, Russia, Sicily, and Normandy, by the "Do-Sol" Vocal Quintet. Conductor: Cyme.
9.15—Loewenguth Quartet, Lucienne Tragin (Songs), Vacellier (Clarinet), Simone Gouat (Pfte.). Märchenerzählungen (Schumann). Aria, "The Secret Marriage" (Cimarosa). A questo seno (Mozart). Die Forelle (Schubert). Ständchen (Schubert). Clarinet Solos (Stravinsky). Quartet (Glazunov).
10.30—News. 11.0—U.S.A. Bulletin.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
6.45 a.m.—Gym. 7.0—Records. 7.15—Press Review. 7.45—Gym. 8.0—Song Records. 11.0—Pasdeloup Concert Orchestra. Conductor: Flament. 12.0 noon—For Farmers. 12.15 p.m.—Pasdeloup Concert Orchestra (contd.). Franzini (Songs); at 12.45: News; Review by Divoire. 2.0—Literary Talk. 2.15—Reading (Tristan Bernard). 2.30—Concert. 4.0—"Ballads"—Records. 4.30—Records: Slav Music. 5.0—Science. 5.15—Books.
5.30—Pasdeloup Concert Orchestra. Conductor: Cloez. Worms ('Cello). Ballet, "Gretna Green" (Guiraud). Suite, "Carnaval" (Guiraud). 'Cello: (a) Le chérubin (Couperin), (b) Adagio and Allegro (Schumann), (c) Habanera (Ravel-Maréchal). 6.0—For Children.
6.30—Lecture-Recital: German Influence on French Opera, with Mozart, Beethoven and Weber Music. 7.30—Talk: The French Theatre after Beaumarchais. 7.45—Poems (Romane).
8.0—"Le Fiancé de Margot"—One-Act Operetta (Planquette). 8.30—News.
8.45—"Kean"—Play (Dumas, arr. Colin), with Rollan in the title role.
10.45—Dance Music—Robert Orchestra.
11.15 p.m.-12.15 a.m. (Thursday)—Light Music by the Robert Orchestra. Overture, "Semiramis" (Rossini). Amoroso (Filipucci). Excerpts, "The Nuremberg Doll" (Adam). Minuet (Massenet). Dance (Brahms). Les violons de Monsieur de Conti (Wormser). Madrilène (Infante).

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.); 120 kW.
Transmits at intervals from 6.15 a.m.
5.45 p.m.—News (German). 5.55—Record. 6.0—News. 6.10—Topical. 6.20-8.15—See Brno. 8.15—Orchestra and Songs from Moravská-Ostrava. 9.0—Time; News. 9.15—See Brno. 9.45-10.0—French News.

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Band; at 7.10: News. 8.0—Records. 8.15—Light Music. 8.45—Records. 9.0—Dance Music. 9.15—Popular Music. 9.45—Records. 10.15—Light Music. 10.45—Records. 11.0—Orchestra. 12.40 p.m.—News. 1.0—Concert. 2.0—Records. 2.30—Dance Music. 3.0—Records. 3.30—Light Music. 4.45—For Children. 5.0—Records. 5.15—Light Music. 5.30—London Music. 5.45—Modern Songs. 6.0—Children's Corner. 6.40—Talk; Racing. 7.0—Concert. 7.40—News. 8.0—Records. 8.20—Talk. 8.30—Ventura and his Collegians. 9.0—Elbeuf Police Band. 11.0—Dance Music. 11.30—From the Cabane Normande. 12.0 m't—Roy Fox and his Band. 12.30-1.0 a.m. (Thursday)—Dance Music.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2) and Turin (No. 2), 1,357 kc/s (221.1 m.).
Transmits at intervals from 7.30 a.m.
4.0 p.m.—News. 4.15-4.50—Light Music. 5.50—Dopolavoro Notes. 6.0—Records; News and Talk (German). 6.20—News in Foreign Languages.
7.5—Time; News. 7.30—Talk.
7.40—Report.
8.0—"Beffare"—One-Act Play (Cerio).
8.30—Concert of Patriotic Music from the Teatro Adriano. Conductor: Molinari. 10.0—News.
10.15-11.0—Dance Music.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 5.0 a.m.
5.0 p.m.—Folk Songs. 5.20—Operetta Music.
5.50—From the National Opera.
7.0—Talk. 7.15—Light Music and Dance Music. 7.45—News. 8.0-10.0—Concert.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.-12.45 p.m.—See Monte Ceneri; at 11.30: News.
3.30-5.0—See Beromünster. 5.0—For Young People. 5.45—Talk: Beethoven's Third Symphony. 6.0—Art Talk. 6.15—Radio Magazine. 6.50—News.
7.0 till Close—From Geneva.
7.0—String Quintet (Lauber), with the Composer. 7.20—Talk.
7.35-9.30—Symphony Concert from the Grand Theatre, Geneva. Suisse romande Orchestra. Guest Conductor: Gui. Symphony in E flat—the Eroica (Beethoven). Chorals on Michelangelo Sonnets (Dalla Piccola). Adagio and Intermezzo (Pergolesi-Gui). Prelude, Choral and Fugue (Franck-Gui). Overture, "La Cenerentola" (Rossini).

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.); and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
4.5 p.m.—Accordion Duets and Songs.
4.45—Gardening Talk by Countess Julie Hamilton. 5.15—Records. 6.15—News. 6.30—Talk.
6.55—Bellman Choir. Conductor: Lundvik. Soldier's Song (Söderman). Längtan (Söderman). Songs (Bellman): (a) Joachim uti Babylon, (b) Bacchi Vaggvisa, (c) Mowitz i afton står bal'n. När löven falla (Lundvik). Sjöfararen vid Milan (Palmgren). Klunkom Velam Velamsson (Palmgren).
7.15—A Motor Tour of North Sweden with Gustaf Näsström.
8.0—Stockholm Concert Orchestra. Conductor: Ansermet. Thibaud (Violin). Violin Concerto in B minor (Saint-Saëns). La valse (Ravel).
8.45—News. 9.0-10.0—Dance Band.

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
5.30 p.m.—Radio Orchestra. Conductor: de Villers. Overture, "The Bartered Bride" (Smetana): Suite, "La Cigale" (Massenet). Prize Song, "The Mastersingers" (Wagner). Entry of the Gods into Valhalla, "The Rhinegold" (Wagner). Excerpts, "The Pearl Fishers" (Bizet). Pieces for Strings (Dubois). Gitanilla (Lacôme).
6.30—News; Topical. 7.15—Records. 7.30—News. 7.45—News (German).
8.30—Strasbourg Municipal Orchestra from the Palais des Fêtes. Conductor: Munch. Wetzel (Pfte.). Overture, "Euryanthe" (Weber). Pfte. Concerto in F minor (Chopin). Suite, Scheherazade (Rimsky-Korsakov).
10.30—News. 11.0—News (German).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral.
1.0-2.0 p.m.—See Deutschlandsender.
2.15—Talks. 2.30—For Girls.
3.0—See Deutschlandsender. 4.45—An Arabian Wedding (Graf).
5.0—See Frankfurt. 6.45—Book Talk. 7.0—News.
7.15—See Hamburg.
7.45—Schubert Cycle III: 1816-1819. Station Orchestra, with Solo Voices and Instruments. Conductor: Leonhardt. Two Marches. Songs to Mayrhofer Text. Sonatina for Pfte. and Violin. Two Songs. Symphony in C minor—the Tragic.
9.0—News.
9.30—Rudolf Bella Songs by Hilde Keefer-Bluthardt (Soprano). Zu spät. Jugendliebe. Herbstahnung. Jetzt ist es endlos still umher. Wogensang. 9.45—Records.
11.0 p.m.-1.0 a.m. (Thursday)—See Frankfurt.

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
7.55 p.m.—News; Light Music. 8.25—Orchestra. 8.40—Songs. 8.55—News.
9.10—"Si nous revions"—Fantasy.
9.45—Paris Programme. 10.15—Selection, "The Gold-diggers of Broadway"—Film.
10.40—Operetta Music.
10.55—News. 11.0—Songs. 11.15—Viennese Orchestra. 11.40—Film Music. 11.55—News. 12.5 a.m. (Thursday)—Light Music. 12.20—Hunting Horns. 12.30—Announcements.

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
Transmits at intervals from 7.30 a.m.
4.0 p.m.—News. 4.15—Paola Della Torre (Soprano), Scaglia (Violin).
4.55-5.5—Talk. 5.50—Dopolavoro Notes. 6.0—News in Foreign Languages.
7.5-11.0—See Rome.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
Transmits at intervals from 6.0 a.m.
5.10 p.m.—Talk: Values and Prices.
5.35—Talk: The Future of Western Civilization.
5.55—"The Flying Dutchman"—Three-Act Opera (Wagner), from the State Opera; at 7.0: News. 9.15—News.
9.25—Newly published Hugo Wolf Songs to Eichendorff and Reinick Text Sung by Patzak (Tenor). Part I. Eichendorff Text. In der Fremde. I. Rückkehr. In der Fremde, II. In der Fremde VI. Part II: Reinick Text. Wohin mit der Freud'. Liebchen, wo bist du. Nachtgruss. Frühlingsglocken. Ständchen. Liebesbotschaft. Frohe Botschaft. 10.5—Announcements.
10.15—Records. Light Music and Dance Music.
11.0-12.0 m't—Schrammel Music by the Alfred Strauss Trio, etc.

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.) Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
Transmits at intervals from 5.30 a.m.
11.3 a.m.—Station Orchestra. Conductor: Górzyński.
11.40 (from Katowice)—Talk. 11.50-12.0 noon—News. 2.0 p.m.—Economics. 2.15—Records: Light Music.
2.55—Technical Letterbox. 3.10 (from Lwów)—Musical Guessing Competition for Children.
3.10—Band. March (Fucik). Slav Rhapsody (Friedemann). Japanese Cherry Blossom Festival (Yoshitomo). The Phantom Brigade (Myddleton). Spanish Dance (Moszkowski). Mazurka (Namyslowski).
4.0—Talk. 4.15—Trio for Oboe, Bassoon and Pfte. (Lalliet). 4.35—Light Music. 4.50 (from Cracow)—Talk: Mickiewicz's House in Paris.
5.0—Topical. 5.10—Sports. 5.20—Announcements. 5.50—Talk: Radio in the Country. 6.0—Poetry. 6.15—Records. 7.35—Talk. 7.45—News.
7.55—Topical.
8.0—Chopin Recital by Imre Ungar (Pfte.). Nocturne in E minor. Etudes in E minor and C flat. Mazurka in C minor. Barcarolle in in F sharp.
8.30—Light Music by the Burski Sisters (Songs) and Tychowski (Guitar).
9.0—Station Orchestra. Conductor: Mierzejewski. Dobosz (Songs). Ney (Violin). Waltz (Brzeziński). Violin Concerto in A (Spohr). Selection, "Popieliny" (Kondracki).
10.0—Dance Records.

Nov. 5 THURSDAY

4 p.m.

BERLIN, Vocal and Instrumental. 4.30—Songs. **BRESLAU**, Light Orchestral. **BUCHAREST** and **RADIO-ROMANIA**, Orchestra. **BUDAPEST (1)**, 4.30—Dance Records.

COLOGNE, 4.30—"Germans at Home and Abroad"—Talks with Records.

DEUTSCHLANDSENDER, Band.

HAMBURG, Variety. 4.45—Talk.

LEIPZIG, 4.10—Talks, Music.

OSLO, Records.

RADIO-NORMANDIE, Concert. 4.45—For Children. **RADIO-PARIS**, Records. **ROME**, News. 4.15—Trio (Pizzetti). 4.55—Talk.

SOTTENS and **BEROMÜNSTER**, Rosy Saron (Pfte.). 4.20—Thé Dansant.

TURIN, News. 4.15—Soprano, Baritone. 4.55—See Rome.

WARSAW, 4.15—German Dances. 4.50—Books.

5 p.m.

ATHLONE, 5.30—Children's Hour.

BERLIN, Records. **BEROMÜNSTER**, Music. 5.30—Orchestra. **BRESLAU**, Light Orchestral. 5.50—Notes. **BRUSSELS (1)**, Records. 5.30—For Children. **BRUSSELS (2)** Records. 5.45—For Children. **BUCHAREST** and **RADIO-ROMANIA**, Notes; Orchestra. **BUDAPEST (1)**, Dance Records. 5.40—Talk.

COLOGNE, Talks with Records (contd.). 5.30—Records.

DEUTSCHLANDSENDER, Station Chamber Choir. 5.30—Talks.

HILVERSUM (1,875 m.), 5.10—Amsterdam Salon Orchestra. **HILVERSUM** (301.5 m.), 5.10—Palla (Organ), Drukker (Violin), Smedes (Tenor).

KALUNDBORG, Banjo. 5.35—English. **KÖNIGSBERG**, **FRANKFURT**, **HAMBURG**, **STUTTGART**, Band.

LEIPZIG, Peasant Dances and Songs. 5.50—Call of Youth.

MUNICH, Light Orchestral.

OSLO, Service. 5.25—Vocal Quartet. 5.50—News.

RADIO-NORMANDIE, Records. 5.15—Light Music. **RADIO-PARIS**, "Les Visionnaires" Comedy (de Saint-Sorlin). **ROME** and **TURIN**, 5.50—Notes.

SOTTENS, French Music—Orchestra. 5.30—For Women. 5.50—Suite, "Tom Jones" (German). **STOCKHOLM**, 5.45—English.

WARSAW, Notes.

6 p.m.

ATHLONE, Children's Hour. 6.15—Spanish Dance Records. 6.35—Irish News. 6.45—News.

BERLIN, Talk: Swimming. 6.15—Violin Sonata in C minor (Grieg). 6.45—Evening Echoes. **BEROMÜNSTER**, Report. 6.5—Talk. 6.30—News. 6.40—Talk. **BRATISLAVA**, 6.30—"The Merry Wives of Windsor"—Opera (Nicolai). **BRESLAU**, Reports. **BRUSSELS (1)**, Music Lesson. 6.30—Records. **BRUSSELS (2)**, For Children. 6.30—Song Records. 6.45—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Educational. 6.20—Records. Cortot (Pfte.). 6.45—Books. **BUDAPEST (1)**, Talk. 6.10—Bulgarian Folk Songs. 6.40—Talk.

COLOGNE, Topical: Records. 6.45—Snapshots.

DEUTSCHLANDSENDER, Records, "Domestic Scene" (Bock). 6.45—Topical.

FRANKFURT, Excerpts, "Festival Oratorio" (Handel), for the Lahr Festhalle Inauguration. 6.40—Topical; Notes.

HAMBURG, Dialect Play. 6.45—Report. **HILVERSUM** (1,875 m.), Orchestra (contd.). 6.25—Talk; Notes. **HILVERSUM** (301.5 m.), Organ, Violin, Tenor (contd.). 6.10—Sports. 6.40—For Children. 6.45—Concert by the "Staalsmeesters."

KALUNDBORG, News. 6.15—Talks. **KÖNIGSBERG**, Notes; Band (contd.). 6.45—Topical.

LEIPZIG, "Fürstenblut für Ochsenblut"—Play (Gilbricht). 6.55—Review.

MONTE CENERI, 6.45—News. **MUNICH**, "Serenata to Triesdorf"—Musical Play (Schaeff-Scheefen, Music arr. Feist). 6.45—Talk.

OSLO, News. 6.30—Record. 6.35—Review.

PARIS (PTT), Gaston Litaize (Organ). 6.30—News. **POSTE PARISIEN**, 6.2—Talk; Records; Exchange. 6.35—For Children. **PRAGUE**, News. 6.10—German. 6.25—Salon Quartet. 6.55—Talk.

RADIO-NORMANDIE, Symphony Orchestra. 6.30—Talks; Racing. **RADIO-PARIS**, Comedy (contd.). 6.45—Medical. **ROME**, Records; Notes; Talk (Spanish). 6.20—News in Foreign Languages.

SOTTENS, For Farmers. 6.30—Suite, "Louise" (Charpentier). 6.50—News. **STOCKHOLM**, English. 6.15—News. 6.30—Talk. **STUTTGART**, Trio in C (Brahms). 6.40—Baden Echoes.

TOULOUSE, 6.3—For Children. 6.40—Operetta Music. 6.50—News. **TURIN**, News in Foreign Languages.

VIENNA, 6.15—Light Orchestral. Tenor.

WARSAW, Silesian Songs (arr. Nieze). Choir. Conductor: Noczo. 6.30—"Autumn" Light Music.

7 p.m.

ATHLONE, Sean C. Bowen (Tenor). 7.15—Debate in Irish. 7.30—Fourth Symphony Concert. Dublin Symphony Orchestra. Conductor: Godfrey Brown. Dr. J. F. Larchet (Speaker), Jean Nolan (Soprano).

BEROMÜNSTER, "L'Italiana in Londra"—Opera (Cimarosa). **BRATISLAVA**, Opera (contd.). **BRESLAU**, News. 7.10—Song Records. **BRNO**, 7.30—"The Gipsies"—Play (Michálek). **BRUSSELS (1)**, For Workers. 7.15—Records. 7.30—News. **BRUSSELS (2)**, "A Village Fête"—Narrative with Records. 7.30—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Aida Helta (Songs). 7.25—Radio Orchestra. Conductor: Nottara. **BUDAPEST (1)**. Talk. 7.10—Berlin Chamber Orchestra. Conductor: von Benda.

COLOGNE, News. 7.10—Variety.

DEUTSCHLANDSENDER, News. 7.15—Soprano, Pftes., Violin. 7.45—Orchestra. Organ, Pfte. (Berlioz, Burgstaller, Strauss).

EIFFEL TOWER, News. 7.20—Foreign Affairs. 7.45—News. 7.55—Home Affairs.

FRANKFURT, News. 7.10—Dance Band, etc.

HAMBURG, **BERLIN**, News. 7.10—Dance Band, etc. **HILVERSUM** (1,875 m.), Notes. 7.40—News. 7.50—Spangen's Choir. de Graaf (Organ). **HILVERSUM** (301.5 m.), Concert (contd.). 7.10—English. 7.40—News. 7.50—Nelson Revue.

KALUNDBORG, Talk. 7.10—Russian and Italian Music. Symphony Orchestra. Guest Conductor: Malko. Roswaenge (Tenor). **KÖNIGSBERG**, News. 7.10—Demonstration for East Prussian Culture Week. Station Orchestra. Conductor: Mayer, and Addresses.

LEIPZIG, News. 7.10—Styrian Folk Music and Dialect Programme.

MONTE CENERI, Light Orchestral. 7.30—Sketch. **MUNICH**, Records. 7.30—"Prince Frederick of Hamburg"—Play (Kleist).

OSLO, Topical. 7.20—Oslo Philharmonic. Conductor: Kielland. Arthur Ask (Horn) (Schubert, Strauss, Bax).

PARIS (PTT), News. 7.25—Talks. 7.45—Pfte. **POSTE PARISIEN**, 7.6—News. 7.30—Talk. 7.35—Light Music. 7.50—Two Pftes. **PRAGUE**, Mácha Memorial Programme. Czech Philharmonic, Choirs, etc.

RADIO-NORMANDIE, Concert. 7.40—News. **RADIO-PARIS**, Records. 7.30—Review. 7.40—Reading. **ROME**, 7.5—News. 7.30—Talk. 7.40—Excerpts, "Consuelo"—Opera (Rendano).

SOTTENS, "La Cécilienne" Choir. Conductor: Aeschbacher. Solo Voice, Violin. **STOCKHOLM**, Chopin Recital. Ignaz Friedman (Pfte.). 7.45—Play. **STUTTGART**, News. 7.10—Violin Records.

TOULOUSE, Light Music. 7.55—News. **TURIN**, 7.5—News. 7.30—See Rome. 7.40—"Gente in treno"—Grotesque (Giannini).

VIENNA, Light Orchestral (contd.).

WARSAW, Light Music. 7.30—Report. 7.45—News, Topical.

8 p.m.

ATHLONE, Concert (contd.).

BEROMÜNSTER, Variety. **BRATISLAVA**, Opera (contd.). **BRESLAU**, "Der Ruf vom anderen Ufer"—Play (Ahlers). **BRNO**, Play (contd.). **BRUSSELS (1)**, Variety. **BRUSSELS (2)**, Orchestra, Toutenel (Baritone). 8.45—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Radio Orchestra. 8.30—News. 8.45—Orchestra. **BUDAPEST (1)**, Orchestra (contd.). 8.10—News. 8.30—Argentine Tango Orchestra.

COLOGNE, Variety.

DEUTSCHLANDSENDER, Orchestra (contd.).

EIFFEL TOWER, Home Affairs. 8.30—Concert.

FRANKFURT, Dance Band, etc.

HAMBURG, **BERLIN**, Dance Band, etc. **HILVERSUM** (1,875 m.), Choir, Organ (contd.). **HILVERSUM** (301.5 m.), Revue (contd.). 8.25—A.V.R.O. Orchestra, Zimbalist (violin). 8.50—Programme from Urk.

KALUNDBORG, Concert (contd.). **KÖNIGSBERG**, Demonstration (contd.).

LEIPZIG, Styrian Programme (contd.) **LILLE**, 8.30—Orchestra, Variety Items, Soprano.

MONTE CENERI, Contemporary French Chamber Music. 8.55—Songs. **MUNICH**, Play (contd.).

OSLO, Orchestra. 8.40—News.

PARIS (PTT), Talks. 8.30—Old French Song Successes. **POSTE PARISIEN**, 8.5—Paul Reboux. 8.20—Frères Jacasse. 8.25—Records. 8.40—Waltzes. **PRAGUE**, Mácha Programme (contd.). 8.30—Vojtek (Organ).

RADIO-NORMANDIE, Records. 8.20—Variety. 8.40—Talk. **RADIO-PARIS**, Madeleine Drouot (Songs), Simone Jacsont (Pfte.). 8.30—News. 8.45—French Music. National Orchestra. Conductor: Inghelbrecht. Raugel Choir. (Saint-Saëns, Fauré). **ROME**, "Consuelo" (contd.). 8.50—Talk.

SOTTENS, Choir, etc. (contd.). 8.35—Military Band, Bugle. **STOCKHOLM**, Play. 8.45—News. **STRASBOURG**, 8.30—"La Surprise de l'amour"—Comic Opera (Poise). **STUTTGART**, "Der Zundelfrieder"—Play with Music after Hebel (Faiss).

TOULOUSE, News. 8.10—Variety. **TURIN**, "Gente in treno" (contd.).

VIENNA, One-Act Plays: (a) "The Love Letter" (Avertschenko), (b) "The Proposal" (Tchekov), (c) "In the House of Crime" (Bernard).

WARSAW, "Silhouettes of Polish Composers"—Paderewski Recital with Talk.

9 p.m.

ATHLONE, Concert (contd.). 9.20—For Golfers. 9.30—Variety.

BERLIN, **BRESLAU**, News. 9.30—Dance Band. **BEROMÜNSTER**, 9.5—News. 9.15—League of Nations. **BRUSSELS (1)**, Talk. 9.15—Variety. **BRUSSELS (2)**, Orchestra, Violin. 9.55—Prayer. **BUCHAREST** and **RADIO-ROMANIA**, Orchestra. 9.45—News (French, German, Romanian). **BUDAPEST (1)**, Orchestra (contd.). 9.45—Station Orchestra.

COLOGNE, News. 9.20—"La Serva Padrona"—Opera (Pergolesi).

DEUTSCHLANDSENDER, News; Topical. 9.30—Flute Sonata (Beethoven). 9.45—Weather.

EIFFEL TOWER, Concert.

HAMBURG, **FRANKFURT**, **STUTTGART**, News. 9.30—Hitler Youth Music Day Concert (Recorded). Conductors: Abendroth and Maasz. **HILVERSUM** (1,875 m.), Choir, Organ (contd.). 9.25—News. 9.30—Records. **HILVERSUM** (301.5 m.), Programme from Urk. 9.10—Wagner Concert from the Concertgebouw. Conductor: Bruno Walter.

KALUNDBORG, Concert (contd.). 9.15—News. 9.30—Reading. 9.55—Dance Band. **KÖNIGSBERG**, News. 9.20—Talk. 9.40—Records.

LEIPZIG, News. 9.30—Zöllner Recital. Schrepper (Violin), The Composer (Pfte.). **LILLE**, Orchestra, etc. (contd.).

MONTE CENERI, Songs. **MUNICH**, News. 9.20—Talk. 9.30—See Hamburg.

OSLO, Talk. 9.15—Cabaret on Records.

PARIS (PTT), Song Successes (contd.); at 9.30—Café Concert. **POSTE PARISIEN**, Waltzes. 9.25—"Le billet de Loterie"—Play (Alléhaut). **PRAGUE** and **BRNO**, News. 9.15—Dance Band.

RADIO-NORMANDIE, Concert. **RADIO-PARIS**, French Music (contd.). **ROME**, Opera Music. 9.45—Dance Music.

SOTTENS, Band, Bugle. **STOCKHOLM**, Foreign Affairs. 9.20—Light Orchestra. **STRASBOURG**, Comic Opera (contd.). 9.45—Trémisot Concert. Orchestra and Artists.

TOULOUSE, News. 9.15—Fantasy. 9.45—Paris Programme. **TURIN**, Dopolavoro Choir.

VIENNA, Play (contd.). 9.10—News. 9.20—Emmy Zopf (Pfte.).

WARSAW, Paderewski (contd.). 9.10—Records. 9.25—Dance Music.

10 p.m.

ATHLONE, Variety. 10.30—News; Light Music.

BERLIN and **MOST GERMAN STATIONS**, Dance Band. **BRUSSELS (1)**, News. 10.10—Records. **BRUSSELS (2)**, News. 10.10—Records: Act I, "The Valkyrie" (Wagner). **BUDAPEST (1)**, News (French, Italian).

COLOGNE, Opera (contd.). 10.20—Dance Band from Berlin.

DEUTSCHLANDSENDER, Dance Records.

EIFFEL TOWER, Concert.

FRANKFURT, See Hamburg. 10.30—Records.

HAMBURG, Concert (contd.). 10.30—Records. **HILVERSUM** (1,875 m.), Records; Bible Reading. **HILVERSUM** (301.5 m.), Wagner (contd.). 10.10—A.V.R.O. Dance Band. 10.40—News. 10.50—Dance Band.

KALUNDBORG, Dance Band. **KÖNIGSBERG**, Records (contd.).

LILLE, Orchestra, etc. (contd.). 10.30—News.

MUNICH, See Hamburg. 10.30—Kreisleriana (Schumann) by Sonnen (Pfte.).

PARIS (PTT), Song Successes (contd.). 10.30—News. **POSTE PARISIEN**, Concert. 10.30—Records.

RADIO-NORMANDIE, Concert. **RADIO-PARIS**, French Music (contd.). 10.45—Dance Music. **ROME**, News; Dance Music.

STRASBOURG, Trémisot Concert (contd.). 10.30—News (French, German). **STUTTGART**, See Hamburg. 10.30—Serenade on Records.

TOULOUSE, Paris Programme. 10.15—Light Music. 10.55—News. **TURIN**, News. 10.15—Dance Music.

VIENNA, News. 10.10—Dance Band, etc.

11 p.m.

BUDAPEST (1), 11.5—News.

HILVERSUM (1,875 m.); Records; Bible Reading. **HILVERSUM** (301.5 m.), Band (contd.). 11.10—Records.

KALUNDBORG, Chimes; Dance Band.

RADIO-NORMANDIE, Dance Music. 11.30—From the Cabane Normande. **RADIO-PARIS**, Dance Music. 11.15—Light Music—Pascal Orchestra.

STUTTGART and **FRANKFURT**, Haydn and Mozart Records.

TOULOUSE, Light Music. 11.55—News.

VIENNA, Dance Band, etc.

12 midnight

RADIO-NORMANDIE, Dance Music. **RADIO-PARIS**, Light Music (contd.).

STUTTGART and **FRANKFURT**, Records (contd.).

TOULOUSE, 12.5—Light Music.

PRINCIPAL EVENTS

SYMPHONY CONCERTS

7.0 Prague: Phil. Orch., Teacher's Choir.
7.10 Kalundborg: Russian, Italian music.
7.20 Oslo: Schubert, Strauss, Bax.
7.30 Athlone: Conductor, Godfrey Brown.
7.30 Northern: Sir Hy. Wood, Myra Hess.
7.45 Deutschlandsender: Berlioz, Strauss, etc.
8.0 Scottish: Sir Donald Tovey.
8.45 Radio-Paris: Saint-Saëns, Fauré.
9.10 Hilversum (301.5 m.): Bruno Walter from the Concertgebouw Wagner.

LIGHT CONCERTS

12.15 Radio-Paris: French music.
12.25 Hilversum (301.5 m.): Conductor: Treep.
3.0 Deutschlandsender: Operetta music.
5.0 Sottens: French orchestral music.
5.10 Hilversum (1,875 m.): Salon orchestra.
6.30 Warsaw: "Autumn."
7.0 Sottens: Choral concert.
7.10 Leipzig: Styrian folk music.
7.25 Bucharest: Radio orchestra.
8.0 Beromünster: Variety concert.
8.15 Regional: Percy Grainger.
8.25 Hilversum (301.5 m.): Treep, Zimbalist.
9.0 Rome: Opera music.
9.45 Budapest 1: Popular orchestral.
9.45 Strasbourg: Tremisot programme.
11.15 Radio-Paris: Pascal orchestra.

OPERAS

7.0 Beromünster: "L'Italiana in Londra."
8.30 Strasbourg: "La surprise de l'amour."
9.20 Cologne: "La serva padrona."

CHAMBER MUSIC

6.0 Stuttgart: C major Trio (Brahms).
7.10 Budapest 1: Chamber orchestra.
9.30 Deutschlandsender: Beethoven.

RECITALS

6.10 Budapest 1: Bulgarian folk songs.
7.0 Stockholm: Ignaz Friedman (pfte.).
8.0 Warsaw: Paderewski music.
8.30 Prague: Organ.
9.20 Vienna: Pianoforte.
10.20 National: Schubert songs.
10.30 Munich: "Kreisleriana" (Schumann).

PLAYS

7.15 National: "Laburnum Grove."
8.0 Vienna: Three one-act plays.
9.25 Poste Parisien: "Le billet de loterie."

LAST NEWS BULLETINS, see Monday

DANCE MUSIC

7.10, Hamburg, etc.; 9.15, Prague; 9.25, Warsaw; 9.30, Berlin, etc.; 9.55, Kalundborg; 10.0, Deutschlandsender, Vienna; 10.10, Hilversum (301.5 m.); 10.15, Turin; 10.25, Regional; 10.45, Radio-Paris; 11.0, Radio-Normandie; 11.15, National.

THURSDAY (November 5)

NATIONAL

For Time Signals, see Monday

10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—At Home To-day.
11.5—Gramophone Records.
11.30—For the Schools—Geography.
11.50—BBC Welsh Orchestra ; Robert Davies (Baritone).
12.45 p.m.—BBC Singers (A).
1.15—Dance Records.
2.0 (ex. Scottish)—Herring Bulletin.
2.0-3.15 (Scottish)—See Regional.
2.5 (ex. Scottish)—For the Schools—"Homes." 2.30—British History. 2.50—"Napoleon."
3.15—The Bournemouth Orchestra, conductor, Richard Austin.
4.45—Gramophone Records.
5.0—"The Gunpowder Plot."
5.15—Dance Orchestra.
6.0—The First News.
6.20—"This Way Out"—John Hilton.
6.40—BBC Dance Orchestra.
7.15—"Laburnum Grove," with Frederick Lloyd and Mary Jerrold.
8.30—"Freedom and the Law."
9.0—The Third News.
9.20—Orchestre Raymonde.
10.0—Mid-week Service.
10.20—Schubert—5. George Parker: Meeresstille, Der Fischer, Wanderers Nachtlied, Erster Verlust, An den Mond, Gebet während der Schlacht, Der Jüngling am Bache, Schwanengesang, Genügsamkeit, Geistergruss, Abends unter der Linde.
10.50—The Orpheus Trio.
11.15—Jack Jackson and his Band.
11.30—Dance Records.

REGIONAL

For Time Signals, see Monday

10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—BBC Scottish Orchestra ; Peggy Dow (Contralto).
11.50—Cinema Organ.
12.30 p.m.—Cinema Orchestra.
1.15—City of Birmingham Orchestra, Conductor, Leslie Heward.
2.0 (ex. Scottish)—Records.
2.0 (Scottish)—For the Schools. 2.5—News; 2.20—Music. 3.0—History.
2.30 (ex. Scottish)—BBC Empire Orchestra.
3.0 (Western, Northern)—For Schools.
3.30 (ex. Scottish)—R.A.F. Band.
3.30 (Scottish)—Mid-week Service.
4.30—Jessie King (Contralto), Chamber Music Ensemble.
5.15—The Children's Hour.
6.0 (Regional, N. Ireland) — BBC Military Band ; Tudor Davies.
6.0 (Midland)—Orchestra.
6.0 (Western)—German Lieder; Dolan Evans (Mezzo-Soprano).
6.0 (Northern)—Peter Fielding Band.
6.0 (Scottish)—Scottish C.W.S. Band ; Adam Hogg (Bass-Baritone).
6.25 (Western)—Records.
6.30 (Northern)—"The Salmon Snatchers"—Esther McCracken.
6.40 (Western)—For Farmers.
6.40 (Scottish)—"Multum in Parvo."
7.0—The Second News.
7.20—Regional Announcements.
7.25 (Midland)—Eye-Witness Account, Warwickshire v. East Midlands.
7.30 (Regional, Midland, N. Ireland)—"Radio Pie."
7.30 (Western)—Talk : "The Health of the Country."
7.30 (Northern)—The Hallé Concert ; Myra Hess (Pfte.), Hallé Orchestra, conducted by Sir Henry Wood.
7.30 (Scottish)—Inside Information by P. I. Keith Murray.
7.45 (Scottish)—Piping.
8.0 (Western)—"Home-Spun" — A Microphone tour of the Penmachno Woollen Mill, in Welsh.
8.0 (Scottish)—Reid Orchestral Concert. Sir Donald F. Tovey.
8.15 (Regional, Midland)—Music by Percy Grainger ; Sybilla Marshall (Soprano), Peter Pears (Tenor). Victor Harding (Baritone), BBC Orchestra, conducted by Percy Grainger.
8.15 (Northern)—"During the Interval."
8.15 (N. Ireland)—Orchestra ; William Boyd (Tenor).
8.35 (Western)—Gramophone Records.
8.45 (Western)—Account of Bridgwater Guy Fawkes Carnival.
9.0 (Western)—Song Recital.
9.0 (N. Ireland)—Account of Ulster Industries Exhibition at Armagh.
9.0 (Scottish)—"Some Guy"—Revue.
9.10 (N. Ireland)—"Village Opinion."
9.20 (Scottish)—Scottish News.
9.30 (ex. Midland, N. Ireland)—The Gunpowder Treason.
9.30 (Midland, N. Ireland)—Variety.
10.0—News Summary.
10.25—Dance Music.
11.30—Late News Summary
11.40—Reading.

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.) ; 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.) ; and Cork, 1,240 kc/s (241.9 m.).

1.30-2.30 p.m.—Time ; Weather ; Stocks ; Records. 5.30—Children's Hour. 6.15—Spanish Dance Records. 6.35—Irish News Feature. 6.45—Weather ; Stocks ; News ; Time. 7.0—Popular Songs by Sean C. Bowen (Tenor). 7.15—Debate in Irish between Sean O'Loinsigh and P. O'Morain.
7.30—Fourth Symphony Concert by the Dublin Symphony Orchestra. Conductor : Godfrey Brown. Dr. J. F. Larchet (Speaker). Jean Nolan (Soprano). Overture, "La Clemenza di Tito" (Mozart). Symphony No. 7 in C (Schubert). Songs. Intermezzo and March from the Karelia Suite (Sibelius). Overture, Di Ballo (Sullivan). Military March in D (Schubert-Sir Henry Wood).
9.20—For Golfers only. 9.30—Variety. 10.30—What happened to-day ; Light Music. 11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.) ; 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.) ; 100 kW.

Transmits at intervals from 5.0 a.m. 11.0 a.m.-12.45 p.m.—See Munich. 12.45—Music. 1.0—News. 1.15—Michalek Band. 2.0—Exchange ; Markets.
3.30—"Good Companions"—Music and Talks.
4.0—Vocal and Instrumental. Soprano Songs (Unger). Pfte.: Orchideen (Luig).
4.30—Songs by the "Sturmfalken."
5.0—Records. 6.0—Talk : Swimming.
6.15—Violin Sonata in C minor (Grieg). 6.45—Evening Echoes. 7.0—News.
7.10—See Hamburg. 9.0—News ; Sports.
9.30-11.0—Station Dance Band.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.) ; 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).

5.30-6.0 a.m.—Gym ; Weather. 11.0—Trio. 11.29—News. 11.40 a.m.-12.45 p.m.—Sextet.
3.30-5.0—See Sottens.
5.0—Music. 5.30—Orchestra. Conductor : Gilbert. 6.0—Traffic Report. 6.5—Medical Talk : Colds. 6.30—News. 6.40—Talk : Wholesalers and Retailers.
7.0—"L'Italiana in Londra"—One-Act Opera (Cimarosa). Zürich Radio Orchestra. Conductor : Hofmann.
8.0 (from Berne)—Variety. 9.5—News. 9.15-9.35—Weather ; League of Nations Report.

BRATISLAVA (Czechoslovakia)

1,004 kc/s (298.8 m.) ; 13.5 kW.

Transmits at intervals from 5.15 a.m.
4.30 p.m.—Wind Quintet (Moyzes).
5.0—Hungarian Transmission : Legal Talk ; Gasparek (Violin). Nocturne (Chopin-Milstein). Slav Dance. (Dvořák-Kreisler). Mazurka (Hubay). Folk Songs (Bartok-Szigeti) ; For Workers.
5.45—News. 6.10—German Lesson. 6.25—Quartet.
6.30—"The Merry Wives of Windsor"—Opera (Nicolai), from the Slovak National Theatre. Conductor : Vincourek. 9.0—News ; Review ; Sports. 9.15—News in Hungarian. 9.30-10.0—Band from Prague.

BRESLAU (Germany)

950 kc/s (315.8 m.) ; 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).

Transmits at intervals from 4.0 a.m. 11.0 a.m.—Orchestra, Dance Band ; at 12.0 noon—News. 1.0 p.m.—News.
1.15—Variety from Deutschlandsender.
2.0—Markets. 3.0—For Mothers.
3.20—Old Music for Two Flutes and Harpsichord (W. F. Bach, Quantz).
3.40—Topical. 4.0—Light Orchestral.
5.50—Announcements. 6.0—Sequence of Reports : Silesian Roads. 7.0—News.
7.10—"Old Favourite Songs" (Records).
8.0—"Der Ruf vom anderen Ufer"—Play (Ahlers). 9.0—News.
9.30-11.0—See Berlin.

BRNO (Czechoslovakia)

922 kc/s (325.4 m.) ; 32 kW.

Transmits at intervals from 5.15 a.m.
6.25 p.m.—Old Songs by the Opus Choir. 7.0—Talk : Building a House. 7.15—Cervinková (Soprano). Three Songs (Jirak). Two Songs (Foerster).
7.30—"The Gipsies"—Play (Michálek) after Mácha's Novel. 9.0-10.0—See Prague.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.) ; 15 kW.

6.37-9.0 a.m.—Records ; News ; Gym. 12.0 noon—Records. 12.30 p.m.—Light Orchestral. Conductor : Walpot. 1.0—News. 1.10—Records. 2.0—Art Notes.
4.55—News. 5.0—Records : Finale from "The Symphony of Psalms" (Stravinsky). Czecho-Slovak Folk Music. 5.30—For Children. 6.0—Music Lesson. 6.30—Records. Part I. Excerpts, "The Tuppenny-halfpenny" Opera (Weill). Part II. Five Waltzes. 7.0—For Workers. 7.15—Song and Dance Records. 7.30—News.
8.0—Variety. Part I. Records. Part II. Frédéric Anspach (Songs). Cavatina (Bizet). Complainte (Rabaud). Aubade (Lalo). Part III. Records. Part IV. Rossini and Verdi Arias by Mlle. Stany Palllot. Part V. Records.
9.0—Talk : Alcoholism.
9.15—Variety. Part I. Records. Part II. René Costy (Violin). Part III. Records. Part IV. Proses lyriques (Debussy), by Frédéric Anspach. 10.0—News. 10.10-11.0—Records.

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.) ; 15 kW.

Programme in Flemish.

6.37-9.0 a.m.—Records ; News ; Gym. 12.0 noon—Records. 12.30—Weather. 12.31—Brenders Dance Band. 12.45—Cabaret. 12.55—Brenders Dance Band. 1.0—News. 1.10—Light Orchestral. Conductor : Walpot. 1.30—Cabaret. 1.40—Records. 2.0—Shipping.
4.55—News. 5.0—Records. 5.45—For Children. 6.30—Flemish Song Records. 6.45—Talk : The Approaching Art Exhibition at Antwerp. 7.0—"A Village Fête"—Narrative with Records. 7.30—Tourist Talk.
8.0—Concert from the Royal Conservatoire, Ghent. Station Orchestra. Conductor : Douliez. Toutenel (Baritone). Overture, "The Thieving Magpie" (Rossini). Four Pieces (d'Ambrosio). Baritone : (a) Two Gipsy Melodies (Dvořák), (b) Abendlied (Schubert), (c) Mijn moederspraak (Benoit). Glowworm Gavotte (Lincke). Violins : Scènes de bal (Mayseder).
8.45—K.A.J. Talk.
9.0—Concert (contd.). Misson (Violin). Viennese Music. Overture, "Die Fledermaus" (Strauss). Violin Solos (Kreisler) : (a) Caprice viennois, (b) Schön Rosmarin. Selection, "A Waltz Dream" (Straus). Songs : (a) From "Fanny Elssler" (Strauss), (b) Vienna, City of My Dreams (Sieczynski). Waltz, "The Dollar Princess" (Fall). Viennese Operetta Potpourri (Hruby).
9.55—Prayer. 10.0—News.
10.10-11.0—Records : Act I, "The Valkyrie" (Wagner).

BUCHAREST (Romania)

823 kc/s (364.5 m.) ; 12 kW. Relayed by Radio-Romania (Brasov), 160 kc/s (1,875 m.).

Transmits at intervals from 4.30 a.m.
4.0 p.m.—Julea Orchestra ; at 5.0, Time ; Markets ; Topical. 6.0—Educational.
6.20—Records of Cortot (Pfte.). 6.45—Books.
7.0—Aida Helta (Songs). Aria, "Alceste" (Gluck). Ave Maria (Gounod). Arias, "Die tote Stadt" (Korngold), "Madame Butterfly" (Puccini).
7.25—Radio Orchestra. Conductor : Nottara. Overture, "Phèdre" (Massenet). Ballet, "Lazy John" (Nedbal). Serenade (Schumann). Dance, "La Gioconda" (Ponchielli). Angélus (Debussy). Dance, "The Bartered Bride" (Smetana).
8.30—News ; Sports. 8.45—Marcu Orchestra. 9.45—News (French, German, Romanian)

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.) ; 120 kW.

Transmits at intervals from 5.45 a.m.
11.5 a.m.—Sáray Cigány Band. 12.30 p.m.—Béla Endre Vocal Ensemble. 3.15—For Housewives. 4.0—For Gardeners. 4.30—Dance Records. 5.40—Talk. 6.10—Bulgarian Folk Songs by Dorita Boneva. 6.40—Talk : Life in a Paris School. 7.10—Berlin Chamber Orchestra. Conductor : Hans von Benda. 8.10—News. 8.30—Argentine Tango Orchestra.
9.45—Station Orchestra. Overture (Auber). Waltz Song, Fata Morgana (Dienzl). Polonaise in A (Chopin). Suite (Coleridge-Taylor). Viennese Operetta Potpourri (Hruby). Waltz (Feherváry). Viennese Song (Zakál). Norwegian Dances (Grieg).
10.0—News (French, Italian). 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.) ; 18 kW.

4.0 p.m.—Talk. 5.10—English Lesson. 5.40—Records. 6.10—Talk. 6.40—Records. 7.20—News. 7.55—Cigány Band.

COLOGNE (Germany)

658 kc/s (455.9 m.) ; 100 kW.

Transmits at intervals from 5.0 a.m.
11.0 a.m.—Light Orchestral. 12.0 noon—News.
12.15 p.m.—See Munich. 12.45—Music. 1.0—News.
1.15-2.0—Variety from Deutschlandsender. 2.45—Markets. 3.0—Light Orchestral. 4.15—Books. 4.30—"Germans at Home and Abroad"—Talks with Records. 5.30—Records ; at 6.0 : Topical. 6.45—Snapshots.
7.0—News.
7.10—Variety. Part I. "Out of the Mouth of Babes. . . ." (arr. Lacroix). Station Orchestra, Matern (Tenor), etc. Part II. Station Dance Band.
9.0—Time ; News ; Sports.
9.20—"La Serva Padrona"—Opera (Pergolesi). Conductor : Breuer.
10.20-11.0—Dance Band from Berlin.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.) ; 60 kW.

Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Breslau. 12.45 p.m.—News.
1.0—Variety. 2.0—Exchange ; Announcements. 2.15—For Mothers. 2.45—Old Songs by Fincke (Tenor). 3.0—Operetta Music. 3.50—Reading. 5.0—Old and New Songs by the Station Chamber Choir. 5.30—Talk. 5.45—Sports.
6.0—"Something for Everyone"—Records. In the interval : "Domestic Scene" (Bock). 6.45—Topical. 7.0—News. 7.15—Mela Gilbert (Soprano), Haentzschel and Piehl (Pftes.), Saenger (Violin).
7.45—Station Orchestra. Conductor : Stange. Drwenski (Organ). Narath (Pfte.). Overture, "Benvenuto Cellini" (Berlioz). Tone Poem (Burgstaller). Don Juan (Richard Strauss).
9.0—News ; Topical.
9.30—Flute, pfte. Sonata (Beethoven).
9.45—Weather.
10.0-11.0—Dance Records.

FRANKFURT (Germany)

1,195 kc/s (251 m.) ; 25 kW. Relayed by Cassel, Coblenz, Freiburg and Trier, 1,195 kc/s (251m.).

Transmits at intervals from 5.0 a.m.
11.0 a.m.-12.45 p.m.—See Munich. 12.45 — Music. 1.0 — News. 1.10—Records. 2.0—Talk on Petroleum ; Markets. 2.15—For Children.
3.0 (from Cohlenz)—"A Musical Rhine Trip." 4.30—An Appreciation of Modern Authors (Müller). 4.45—Talk : Burdach.
5.0—See Königsberg.
6.0 (from Freiburg)—Excerpts, "Festival Oratorio" (Handel) for the Inauguration of the New Festhalle, Lahr. 6.40—Topical. 6.55—Announcements. 7.0—News.
7.10—Hauck Dance Band and others. 9.0—Time ; News ; Sports.
9.30—See Hamburg. 10.30—"Con Fuoco"—Instrumental Records.
11.0 p.m.-1.0 a.m. (Friday)—See Stuttgart.

HAMBURG (Germany)

904 kc/s (331.9 m.) ; 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg, and Stettin, 1,330 kc/s (225.6 m.).

Transmits at intervals from 5.15 a.m.
11.0 a.m.—Shipping ; Weather.
11.10 a.m.-12.45 p.m.—Music from Munich. At 12.0: News. 12.45—Music. 1.0—News. 1.20—Music. 2.0—Exchange ; Shipping.
2.30—Records of Dusolina Giannin (Soprano). 3.0—Drechsel and Ragotzky Bands. 4.0—Variety from the Theatre World. 4.45—Talk : Caligraphy.
5.0—See Königsberg. 5.45—Shipping.
6.0—"Takeltüch"—Dialect Play (Bellmer). 6.45—Report : Gliding.
7.0—News.
7.10—Station Dance Band, etc. 9.0—News.
9.30—Hitler Youth Music Festival (Recorded). Conductors : Abendroth and Maasz. Concerto grosso (Bresgen). Tafelmusik (Schäfer). Heilig Vaterland (Spitta).
10.30—German Overtures (Records).

HILVERSUM (1,875 m.) (Holland)

160 kc/s ; 10 kW until 2.40 p.m. ; 100 kW from 2.40 p.m.

7.40-8.55 a.m.—K.R.O. Programme. Records.
9.40-10.40 — N.C.R.V. Programme. Records and Religious Programme.
10.40 a.m.-1.40 p.m.—K.R.O. Programme. 10.40—Records. 11.10—Religious Address. 11.40—Police Messages ; K.R.O. Orchestra. Conductor : van 't Woud. In the intervals, Records.
1.40 till Close Down—N.C.R.V. Programme. 1.40—Hobbies. 2.40—Records. 2.55-3.25—For Women. 3.40—Bible Reading. 4.40—For Children.
5.10—Amsterdam Salon Orchestra. Conductor : Kiekens. 6.25—Talk ; News ; Press Review ; Report. 7.40—News.
7.50—Spangen's Choir. Conductor : Vranken Jr. de Graaf (Organ). 9.25—News. 9.30-11.10—Records ; Bible Reading.

HILVERSUM (301.5 m.) (Holland)

995 kc/s ; 15 kW until 2.40 p.m. ; 60 kW from 2.40 p.m.

A.V.R.O. Programme.
7.40 a.m.—Records. 9.40—Service. 9.55—Records.
10.10—van Egmond (Organ), v.d. Woude (Violin). 10.55—Staalman (Recitations). 11.25—A.V.R.O. Orchestra. Conductor : Treep. 12.10 p.m.—Records. 12.25—A.V.R.O. Orchestra, Conductor : Treep, and Records. 1.40—For Women. 2.10—Records. 2.45—Sewing and Embroidery. 3.25—Records. 3.40—For Hospitals. 4.10—Records. 4.30—Play for Children.
5.10—Palla (Organ), Drukker (Violin), Smedes (Tenor). 6.10—Sports. 6.40—For Children. 6.45—Concert by the "Staalsmeesters." 7.10—English Lesson. 7.40—News.
7.50—Nelson Revue, from "La Gaîté," Amsterdam. 8.25—A.V.R.O. Orchestra. Conductor : Treep. Zimbalist (Violin). 8.50—Programme from Urk.
9.10—Wagner Concert from the Concertgebouw, Amsterdam. Conductor : Bruno Walter.
10.10—A.V.R.O. Dance Band. 10.40—News. 10.50—A.V.R.O. Dance Band. 11.10-11.40—Records.

KALUNDBORG (Denmark)

240 kc/s (1,250 m.) ; 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).

Transmits at intervals from 6.0 a.m.
11.0 a.m.-1.0 p.m.—Bendix String Ensemble. 2.0—Julian Orchestra from Aalborg. 3.5—For Boys. 3.50—Announcements. 3.56—Poem. 4.0—Talk: Belgian Miners. 4.25—Weather. 4.40—Exchange ; Markets. 4.50—Records. 5.0—Skjoldborg (Banjo). 5.15—Weather. 5.25—English Lesson. 6.0—News. 6.15—Talk. 6.45—Talk : Wireless and Aviation.
7.10—Seventh Thursday Concert from the State Broadcasting Building. Radio Symphony Orchestra. Guest Conductor : Malko. Helge Roswaenge (Tenor). Part I : Russian Music. Symphony in B minor—the Pathetic (Tchaikovsky). Ten Minutes Interval. Part II : Italian Music. Arias, "Aida" (Verdi), and "Tosca" (Puccini). Sarabande Gigue and Badinerie (Corelli) Arias, "Turandot" (Puccini). Overture, "William Tell" (Rossini).
9.15—News. 9.30—Reading.
9.55-11.30—Skjoldborg Dance Band at 11.0 : Chimes.

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)

1,031 kc/s (291 m.) ; 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).

Transmits at intervals from 5.0 a.m.
11.0 a.m.-12.45 p.m.—See Munich

12.45—Music. 1.0—News. 1.10—Talk: Stijn Streuvels.
1.25—Variety from Deutschlandsender.
2.0—"Autumn"—Musical Programme.
2.25—Liban Chamber Music. Autumn Songs. Chamber Serenade.
2.55—Light Orchestral. At 3.30—Periodicals. 4.20—Sketch. 4.40—For Farmers.
5.0—Börschel Band, etc.; at 6.0—Announcements. 6.45—Topical. 7.0—News.
7.10—Demonstration for East Prussian Culture Week, from the Town Hall. Station Orchestra. Conductor: Mayer. Festival Prelude (Ehrenberg). Address by Herr Moraller. Concerto grosso in C (Handel). Address by Herr Koch. Overture, "The Mastersingers" (Wagner). Address by Herr Paltzo. National Anthems.
9.0—News; Sports. 9.20—Legal Talk.
9.40-11.0—Light Music and Dance Music on Records.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
Transmits at intervals from 5.0 a.m. 11.0 a.m.-12.45 p.m.—See Munich. 12.45—Music. 1.0—News.
1.15—Varietyfrom Deutschlandsender. 2.0—For Women. 2.40—Books. 3.0—Records. 4.0—Exchange. 4.10—Talk: Kepler. 4.30—Music. 4.40—Talk: Infantry Regiment No. 73.
5.0—Peasant Dances and Songs by Boys and Girls. 5.50—Call of Youth. 6.0 (from Dresden)—"Fürstenblut für Ochsenblut"—Play (Gilbricht). 6.55—Review. 7.0—News.
7.10—Styrian Folk Music and Dialect Programme. 9.0—News; Sports.
9.30—Zöllner Recital by Schrepper (Violin) and the Composer (Pfte.). Fantasia. Elegy. Fragments.
10.0-11.0—Dance Band from Berlin.

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
8.30 p.m.—Station Orchestra. Conductor: Soret. René Rucart (Variety Items), Julia Bossut (Soprano). 10.30—News.

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.); 15 kW.
Transmits at intervals from 11.0 a.m. 6.45 p.m.—News. 7.0—Light Music by the Bob Engel Orchestra.
7.30—"Fidanzati, non Bisticciatevi"—Sketch (Calgari).
8.0—Contemporary French Chamber Music. Overture (Poulenc). Concerto for Orchestra (Roussel). Actualités (Milhaud). Impressions parisiennes (Ibert).
8.55-9.15—Bice Leni (Popular Songs).

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
Transmits at intervals from 5.0 a.m. 11.0 a.m.—Dance Band. 12.0 noon—News. 12.15 p.m.—Light Orchestral. 12.45—News.
1.0-2.0—See Deutschlandsender. 3.0—For Farmers. 3.10—Hohlbaum reads. 3.30—Song Cycle (Scherber). 4.35—Talk: Madrid. 4.50—For Farmers. 5.0—Light Orchestral. 6.0 (from Nürnberg)—"Serenade to Triesdorf"—Musical Play of the Romantic Period (Schaeff-Scheefen, Music arr. Feist). 6.45—Talk: Prof. Buchner. 7.0—Records.
7.30—"Prince Frederick of Homburg"—Five-Act Play (Kleist). 9.0—Time; News. 9.20—Talk: Traffic Accidents.
9.30—See Hamburg.
10.30-11.0—Kreisleriana (Schumann) by Sonnen (Pfte.).

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.). Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trondelag, 629 kc/s (476.9 m.)
Transmits at intervals from 10.40 a.m. 5.0 p.m.—Service. 5.25—Nordsjö Vocal Quartet. 5.50—News. 6.30—Time; Records. 6.35—Industrial Review. 7.0—Topical.
7.20—Oslo Philharmonic. Conductor: Kielland. Arthur Ask (Horn). Entr'acte Music, "Rosamunde" (Schubert). Horn Concerto in F (Strauss). Symphony in E flat minor (Bax).
8.40—News. 9.0—Topical. 9.15-10.0—Cabaret (Records).

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
7.0 p.m.—News. 7.20—Foreign Affairs. 7.45—News. 7.55—Home Affairs. 8.30—Concert.

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
Transmits at intervals from 7.10 a.m. 12.0 noon—Exchange. 12.5 p.m.—Records. The International Orchestra. 12.20—Silly Symphony. 12.35—Exchange. 12.39—Variety. 1.36—Records. 1.50—Film Notes. 2.0, 3.45, and 4.35—Exchange.
6.0—Call. 6.2—Talk. 6.9—Records. Sonata (Saint-Saëns). 6.30—Exchange. 6.35—For Children. 7.6—News. 7.30—Legal Talk. 7.35—Light Music. 7.50—Wiener and Doucet (Two Pftes.). 8.5—Paul Reboux. 8.20—Frères Jacasse. 8.25—"Bearn"—Records. 8.40—Waltzes. 9.25—"Le billet de Loterie"—Play (Alléhaut). 10.0—Concert. 10.30-11.0—Records: Light Music.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m. 6.0 p.m.—Gaston Litaize (Organ), from the "Schola Cantorum." 6.30—News. 7.25—Talk; Hygiene and Sport. 7.38—Talk.
7.45—Motte-Lacroix (Pfte.). Sousbois (Chabrier). Idyll (Chabrier). Bourrée Ronde (Roussel).
8.0—Talk. 8.15—For Youth. 8.25—Aeronautics. 8.30—Old French Song Successes presented by Danerty. Orchestra. Conductor: Chobillon, and Artists; 9.30—Café Concert. 9.45—Old French Song Successes (contd.). In the interval, Talk. 10.30—News.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
6.45 a.m.—Gym.; Records. 7.15—News; Gym. 8.0—German Lesson. 8.20—Records. 8.30—For Housewives. 9.0—For Scouts. 9.30—Léonce de Saint Martin (Organ). 11.0—French Music, Orchestra. Conductor: Archaimbaud. 11.30—For Farmers. 11.45—Protestant Address. 12.15 p.m.—French Music (contd.). Léonore Humbert (Songs); at 12.45: Review; News. 2.0—Talk: Sicily. 2.15—Talk: North African Authors. 2.30—Mephistopheles in Music (Records). 3.0—Markets; Records. 3.30—Reading (Rilk). 3.45—Talk: Legends of Annam. 4.0—Hahn Records.
4.30—English and American Music (Records).
5.0—Development of the Social Satire. IV. "Les Visionnaires"—Five-Act Comedy in Verse (de Saint-Sorlin). 6.45—Medical Talk. 7.0—Records. 7.30—Review. 7.40—Reading (Lintier).
8.0—Madeleine Drouot (Songs), Simone Jacsont (Pfte.). Part I. Songs. Promenade à mule (Fourdrain). Indian Serenade (Hartmann). Songs (Hué): (a) La Fiancée du Roi, (b) Le Bonnet de la Meunière. Désespérance (Levadé). Les roses et les muguets (Busser). Part II. Pfte. Bourrées (Bach). Le bavolet flottant (Couperin, Sen.). Arabesque (Debussy). Rigaudon (Ravel). 8.30—News.
8.45—French Music. National Orchestra. Conductor: Inghelbrecht. Raugel Choir. Symphony with Organ (Saint-Saëns). Excerpts, "Penelope" (Fauré).
10.45—Dance Music—Pascal Orchestra.
11.15 p.m.-12.15 a.m. (Friday)—Light Music, Pascal Orchestra. Au printemps (Gounod). Marche des sous-officiers (Faidey). Ukrainian Melodies (Ferraris). Moment musical (Schubert). Cuckoo (Branga). Les papillons (Berger).

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.); 120 kW.
Transmits at intervals from 5.15 a.m.
6.0 p.m.—News. 6.10—German Lesson. 6.25—Salon Quartet. 6.55—Talk on the following Concert.
7.0—Karel Mácha Memorial Programme from the Smetana Hall. Czech Philharmonic, Prague Teachers' [Choir, Conservatoire Speaking Choir. Conductor: Jirák. Otava (Baritone) and Reciters. Symphonic Poem, Vysehrad (Smetana). Talk. Poems (Madra). May (Foerster). Symphonic Poem, Vltava (Smetana).
8.30—Vojtek (Organ). 9.0—Time; News. 9.15-10.0—Milinovsky Dance Band.

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Music; at 7.10: News. 8.0—Jack Savage and his Cowboys. 8.15—Records. 8.30—Light Music. 8.45—Records. 9.0—Dance Music. 9.15—Records. 9.30—Light Music. 9.45—Songs. 10.0—Sacred Music from Lisieux. 11.0—Chansonnettes. 12.0 noon—Choirs.

Codfrey Brown, who conducts Athlone's Symphony Concert at 7.30 p.m.

12.20 p.m.—Military Music and Choir. 12.40—News. 1.0—For Children. 2.30—Sacred Music from Lisieux. 3.30—Records. 3.45—Concert. 4.45—For Children. 5.0—Records. 5.15—Light Music. 5.30—London Music. 5.45—Light Music. 6.0—Symphony Orchestra. 6.30—Talks; Racing. 7.0—Concert. 7.40—News. 8.0—Records. 8.20—Variety. 8.40—Talk.
9.0—Concert. Symphonic Prelude (Sporck). Rêverie (Ketelbey). March, "Lohengrin" (Wagner). Overture, "Le nouveau Seigneur du Village" (Boieldieu). Meditation (Sporck). Two Hungarian Dances (Brahms). The Japanese Screen (Ketelbey). Waltz (Wesley).
11.0—Dance Music. 11.30—From the Cabane Normande. 12.0 m't-1.0 a.m. (Friday)—Dance Music.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2) and Turin (No. 2), 1,357 kc/s (221.1 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15—Trio (Pizzetti). 4.55-5.5—Talk. 5.50—Dopolavoro Notes. 6.0—Records; Announcements and Talk (Spanish). 6.20—News in Foreign Languages. 7.5—Time; News.
7.30—Talk: The War in Ethiopia.
7.40—Excerpts, "Consuelo"—Opera (Rendano). Conductor: Morelli. Chorus Master: Costantini. Cast: Maria Persula, Mazziotti, Contl, Meletti, Gualda Caputo and Agnese Dubbini. 8.50—Talk.
9.0—Opera Concert. Conductor: Morelli. Overture, "Maria di Rohan" (Donizetti). Nocturne, "Silvano" (Mascagni). Intermezzo, "I'quattro rusteghi" (Wolf-Ferrari). Intermezzo, "Silberia" (Giordano). Overture, "The Force of Destiny" (Verdi).
9.45-11.0—Dance Music; at 10.0—News.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 10.0 a.m. 5.0 p.m.—Light Music. 5.20—Symphony Music. 5.35—Songs. 6.10—Radio Review. 6.30—Variety Concert. 6.40—Talk.
6.55—Excerpts, "Faust"—Opera (Gounod). Opera Orchestra and Singers. 8.0—Light Orchestral; at 8.35: Notes. 8.40-10.0—Light Music and Dance Music.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.-12.45 p.m.—See Beromünster; at 11.30: News.
3.30-5.0—From Geneva.
3.30—'Cello Suite (Bach), by Henri Honegger. 3.50—Rosy Saron (Pfte.). 4.20—Thé dansant.
5.0—French Music. Radio Suisse romande Orchestra. Conductor: Appia. (Rhené-Baton, Guiraud, Saint-Saëns.) 5.30—For Women.
5.50—Suite, "Tom Jones" (German). Conductor: Appia. 6.0—Markets. 6.10—For Farmers.
6.30—Suite, "Louise" (Charpentier) Conductor: Appia. 6.50—News.
7.0—Concert from La Chaux-de-Fonds. "La Cécilienne" Choir, Conductor: Aeschbacher, Caro Faller (Songs), Schmidt (Violin). Part I. Old Music, Songs for Choir (Hassler, Eccard). Arias (Handel, Carissimi). Violin Sonata (Handel). Part II. Contemporary Swiss Music. L'amour de moi. (Mattioli). C'est pour vous (Mathey). Songs (Jaques-Dalcroze). Movement, Sonata in B flat (Huber). Cantabile (Aeschbacher). Songs for Choir (Aeschbacher). 8.20—Literary Interlude.
8.35-9.15—Popular Music from La Chaux-de-Fonds. Military Band with Matthey (Bugle).

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.), and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
4.5 p.m.—Religious Address. 4.30—Children's Letters. 4.50—Records. 5.45—English Lesson. 6.15—News. 6.30—Talk: Children.
7.0—Chopin Recital by Ignaz Friedmann, from the Royal Academy of Music. Polonaise in B flat. Sonata in B minor.
7.45—Play. 8.45—News. 9.0—Foreign Affairs.
9.20-10.0—Light Music by the Septiman Orchestra. Hymn to the Sun (Peterson-Berger). The Dancing Nymph (Peterson-Berger). Pieces (Åkerberg): (a) Sarabande, (b) Minuet, (c) Gavotte. Miniatures (Björkander). Romance (Wohlfart). Valse d'amour (Nordqvist).

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
8.30 p.m.—"La Surprise de l'amour"—Two-Act Comic Opera (Poise). Conductor: de Villers.
9.45 (approx.)—Trémisot Concert. Orchestra and Artists. Conductor: de Villers. Overture, "Pyramus and Thisbe." Scene, "Nausicaa." Symphonic Poem, Icare. 10.30—News (French, German).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
Transmits at intervals from 5.0 a.m. 11.0 a.m.-12.45 p.m.—See Munich. 12.45—Music.
1.0-2.0—See Deutschlandsender. 2.30—Sketch for Women (Schlenker).
3.0—See Deutschlandsender; at 3.50: Youth Programme. 4.45—Talk: Garden Pests.
5.0—See Königsberg.
6.0—Trio in C (Brahms). 6.40—Baden Echoes from Karlsruhe. 7.0—News. 7.10—Violin Records.
8.0—"Der Zundelfrieder"—Play with Music, after Hebel (Faiss). 9.0—Time; News; Sports.
9.30—See Hamburg. 10.30—Serenade on Records.
11.0 p.m.-1.0 a.m. (Friday)—Haydn and Mozart Records.

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
7.55 p.m.—News. 8.10—Mandoline Band. 8.15—Variety.
8.45—Operetta Airs. 9.0—News.
9.15—"Conseils"—Fantasy. 9.45—Paris Programme. 10.15—Operetta Music. 10.40—Orchestra. 10.55—News. 11.0—Viennese Orchestra.
11.15—Film Music. 11.40—Songs and Marches. 11.55—News. 12.5 a.m. (Friday)—Light Music. 12.20—Bal Champêtre Orchestra. 12.30—Announcements.

THURSDAY (November 5)

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15—Soprano and Baritone.
4.55-6.0—See Rome. 6.0—News in Foreign Languages. 7.5—Time: News.
7.30—See Rome.
7.40—"Gente in treno"—Grotesque in Three Scenes (Giannini).
9.0 (approx.)—Dopolavoro Choir. Conductor: Rostagno. 10.0—News. 10.15-11.0—Dance Music.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
Transmits at intervals from 6.0 a.m.
6.0 p.m.—News.
6.15—Light Orchestral, with Feller (Tenor).
8.0—One-Act Plays: (a) "The Love Letter" (Avertschenko). (b) "The Proposal" (Tchekov), (c) "In the House of Crime" (Bernard). 9.10—News.
9.20—Emmy Zopf (Pfte.). Concert Prelude (Röhrling). Humoresque (Marx). Scherzo (Königer). Ballad (Wetchy). Nachklänge zum Karneval (Hasenöhrl). Capriccio (Weileba). Austrian Dances (Bittner). 10.0—News.
10.10-12.0 m't—Gaudriot Dance Band, etc.

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.); Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
Transmits at intervals from 5.30 a.m.
11.3 a.m.—Station Salon Trio: Sarabande (Halvorsen). Rondino (Mayer). Second Movement from the Pfte. Sonata (Beethoven). Rigaudon (Raff). Serenade (Szejacs). Song without Words (Mendelssohn). Minuet (Beethoven). Oriental Piece (Rimsky-Korsakov). Folk Dance (Hartman). Scherzo (Gade). Bethleem (Malling). Tarantella (Heller).
11.40—Talk. 11.50-12.0 noon—News. 2.0—Economics.
2.15—Statlon Symphony Orchestra. Conductor: Mierzejewski. Lucie Szczepańska (Soprano). Overture, "Der Geist des Wojewoden" (Grossman). Arias, "The Countess" (Moniuszko) and "La Traviata" (Verdi). Selection, "Manon" (Massenet). Opera Arias.
3.0—Letterbox. 3.15—Art. 3.20—For Children. 3.35—Debussy Records. 4.0—Report: German Youth.
4.15 (from Cracow)—German Dances. Orchestra. Conductor: Herman. German Dances (Dittersdorf, Mozart). Rondo (Schubert). Rondo (Reger). Potpourri, Tirol in Lied und Tanz (Fetras). German Dance Suite (Reger). Styrian Dances (Lanner). Hofballtänze (Lanner).
4.50—Book Review. 5.0—Topical. 5.50—Topical. 6.0 (from Katowice)—Silesian Songs (arr. Nicze) by the Silesian Railway Workers' Choir.
6.30 (from Lwów)—"Autumn"—Musical Sequence (arr. Leski), by the Eryan Choir and the Schatz Salon Quartet. 7.30 (from Lwów)—Report. 7.45—News. 7.55—Topical.
8.0—Silhouettes of Polish Composers—Paderewski Recital with Introductory Talk. Szlemińska (Songs) and Turczyński (Pfte.). Sonata in E flat minor. Six Songs. Melody in G flat. Minuet. Intermezzo. Moment Musical. Cracovienne fantastique.
9.10—Records. 9.25—Dance Music.

FRIDAY November 6

4 p.m.

BERLIN, Records. 4.30—"The River Oder" (Pflug). 4.50—Health Hints. **BEROMÜNSTER** and **SOTTENS**, 4.20—String Orchestra. **BRESLAU**, Orchestra. **BUCHAREST** and **RADIO-ROMANIA**, Reading. 4.15—Orchestra. **BUDAPEST (1)**, Talk. 4.30—Orchestra. 4.55—Sports.

COLOGNE, Talks and Records.

DEUTSCHLANDSENDER, Orchestra and Artists. 4.50—Hitler Youth Music Day Concert (Recorded) (Maass, Spitta).

FRANKFURT, Light Orchestral. 4.30—We visit the Observatory. 4.45—"Chestnuts" (Gerhardt).

HAMBURG, See Deutschlandsender. 4.30—Talk. **HILVERSUM** (1,875 m.), Organ. 4.40—Recitation and Records. **HILVERSUM** (301.5 m.), Records. 4.40—For Children.

KALUNDBORG, Jørgensen's Lyrics. 4.40—Exchange. 4.50—Accordion. **KÖNIGSBERG**, Records. 4.20—Angrabeit in Letters. 4.45—Report.

OSLO, Concert.

RADIO-NORMANDIE, Concert. 4.45—For Children. **RADIO-PARIS**, Zagreb Quartet (Odak, Dvořák).

STOCKHOLM, 4.5—For Young People. 4.25—Records. **STUTTGART**, See Deutschlandsender. 4.30—Trenkner Songs.

TURIN and **ROME**, News. 4.15—Dance Band.

WARSAW, Reading. 4.15—'Cello, Songs. 4.50—Topical.

5 p.m.

ATHLONE, 5.30—Children's Hour.

BEROMÜNSTER, Music. 5.30—For Children. 5.35—Talk. 5.45—Grieg Songs. **BRESLAU**, Orchestra. 5.50—Programmes. **BRUSSELS (1)**, Accordion. 5.30—Talk with Records: The Minuet. **BRUSSELS (2)**, Radio Orchestra, Records. 5.45—For Children. **BUCHAREST** and **RADIO-ROMANIA**, Topical, Orchestra. **BUDAPEST (1)**, Sports, Orchestra. 5.30—Talk.

COLOGNE, Light Music. Orchestra, Pfte. Duo, Songs.

DEUTSCHLANDSENDER, Concert (contd.). 5.20—Records of Famous Violinists.

HAMBURG, Records. 5.45—Shipping. **HILVERSUM** (1,875 m.), Recitation and Records. **HILVERSUM** (301.5 m.), For Children. 5.10—Organ.

KALUNDBORG, Accordion. 5.15—Weather. 5.35—German. **KÖNIGSBERG**, Light Orchestral.

LEIPZIG, **BERLIN** and **FRANKFURT**, Dresden Trio, Pfte., Band.

MUNICH, Light Orchestral; at 5.30: Topical.

OSLO, English. 5.25—Inger Mikkelsen and Naalsund. 5.50—News.

PARIS (PTT), Gluck Concert. Pasdeloup Concert Orchestra. 5.30—Talks.

RADIO-NORMANDIE, Records. 5.15—Light Music. **RADIO-PARIS**, English. 5.20—Films. 5.30—Pasdeloup Concert Orchestra. Rosine Schor (Songs). **ROME** and **TURIN**, 5.50—Notes.

SOTTENS, Interlude. 5.15—Bridge. 5.30—Notes. **STOCKHOLM**, Records. 5.15—Lecture. **STUTTGART**, "Round the World in Sixty Minutes"—Records.

WARSAW, Notes.

6 p.m.

ATHLONE, Children's Hour. 6.15—Prizewinning Amateurs at the Microphone. 6.35—Irish News Feature. 6.45—News.

BERLIN, Programmes. 6.20—Strauss Records. 6.45—Evening Echoes. **BEROMÜNSTER**, Notes. 6.20—To be announced. 6.30—News. 6.40—Mandoline Double Quartet. **BRATISLAVA**, 6.10—Folk Songs with Cigány Band. 6.35—Harp. 6.55—Band. **BRESLAU**, "von Spee's Squadron"—an Epic of the Great War (Recorded). **BRUSSELS (1)**, Talk. 6.15—Records. 6.30—Delvigne (Pfte.). **BRUSSELS (2)**, For Children. 6.25—Talk. 6.30—Flemish Music. 6.45—Talk.

BUCHAREST and **RADIO ROMANIA**, Educational. 6.20—Talk. 6.35—"Andrea Chenier"—Opera (Giordano) (Records). **BUDAPEST (1)**, Tarogato. 6.30—From the Opera.

COLOGNE, Music (contd.). 6.45—Snapshots.

DEUTSCHLANDSENDER, Cabaret with Dance Band, etc. 6.45—Events. 6.55—For Ex-Servicemen.

FRANKFURT, Records. 6.40—Topical, Exchange, Programmes.

HAMBURG, "Automatic Machines"—Radio Picture. 6.45—Review. **HILVERSUM** (1,875 m.), Records. 6.10—Talk, Notes. **HILVERSUM** (301.5 m.), Organ. 6.10—Review 6.30—Records. 6.40—Talk.

KALUNDBORG, News. 6.30—Review. **KÖNIGSBERG**, Notes, Call of Youth. 6.20—Talk. 6.45—Topical.

LEIPZIG, Trio, Pfte., Band (contd.). 6.40—Talk, Review.

MUNICH, Pfte. Concerto in D minor (Brahms), by Frey. 6.45—Talk.

OSLO, News, For Farmers. 6.45—Accordion.

PARIS (PTT), Pasdeloup Concert Orchestra. Rosine Schor (Songs). 6.30—News. **POSTE PARISIEN**, Topical. 6.9—Records. 6.25—Talk, Exchange, For Women. **PRAGUE**, News. 6.20—Folk Songs. 6.40—"Brewers"—Comedy (Erben), with Music.

RADIO-NORMANDIE, For Children. 6.45—Talk. Racing. **RADIO-PARIS**, For Women. 6.30—Pasdeloup Concert Orchestra (Beethoven, Fauré, Honegger, Florent Schmitt). **ROME**, Records, News and Talk in Dutch. 6.20—News in Foreign Languages.

SOTTENS, Notes. 6.15—Radio Magazine. 6.50—News. **STOCKHOLM**, 'Cello. 6.15—News. 6.30—Review. **STUTTGART**, Wonders of the Universe (Bierkowski). 6.20—Ballads (arr. Scholler). 6.45—Talk.

TOULOUSE, Light Music. 6.50—News. **TURIN**, News in Foreign Languages.

VIENNA, News. 6.20—Wolf Songs by Duhan (Baritone), Patzak (Tenor).

WARSAW, Reading. 6.20—Songs. 6.45—Opera Excerpt.

7 p.m.

ATHLONE, Gardening. 7.10—Haydn Wood Concert. Station Orchestra. Eva Wilson (Songs). 7.45—Books.

BERLIN, HAMBURG, KÖNIGSBERG, News. 7.10—Orchestra. **BEROMÜNSTER**, Dialect Programme with a Ländler Orchestra. **BRATISLAVA**, Band. 7.35—See Prague. **BRESLAU**, News. 7.10—Variety from Saarbrücken. **BRUSSELS (1)**, Talk. 7.15—Handel and Debussy Songs. 7.30—News. **BRUSSELS (2)**, Radio Orchestra. 7.30—Talk. **BUCHAREST** and **RADIO-ROMANIA**, "Andrea Chenier" (contd.). **BUDAPEST (1)**, From the Royal Opera (contd.).

COLOGNE, News. 7.10—"Soldier Comrades." "von Spee's Squadron"—An Epic of the Great War (Recorded); Soldier Songs; Where are you, Comrade?

FRANKFURT, News. 7.10—Theatre Excerpts, "The Bartered Bride" (Smetana), "Der Bettelstudent" (Millöcker). "Tsar and Carpenter" (Lortzing), and "The Tsarevitch" (Lehár).

HILVERSUM (1,875 m.), Review, Report. 7.40—News. 7.50—N.C.R.V. Wind Band. **HILVERSUM** (301.5 m.), Records. 7.30—News.

KALUNDBORG, Carillon Recital. 7.10—Festival Service for the Fourth Centenary of the Reformation in Denmark, from Copenhagen Cathedral. Choir, Orchestra, Organ.

LEIPZIG, News. 7.10—Dance Music and Light Music. Orchestras, Songs.

MONTE CENERI, 7.50—"La gran voce"—Play (Frigerio).

OSLO, Scandinavian Review. 7.25—Helga Lökke (Violin). (Bach, Chausson).

PARIS (PTT), Topical. 7.38—Suite pastorale (Chabrier), by the Pasdeloup Concert Orchestra. **POSTE-PARISIEN**, 7.6—News. 7.30—Talk. 7.37—Song Records and Talk. **PRAGUE**, Comedy (contd.). 7.35—Light Music and Dance Music.

RADIO - NORMANDIE, Concert. 7.40—News. **RADIO-PARIS**, Orchestra (contd.). 7.30—Talks. **ROME**, 7.5—News. 7.40—"The Cinema Girl"—Operetta (Weinberger).

SOTTENS, Finance. 7.20—Variety. **STOCKHOLM**, Vocal Quartet. 7.30—Talk. 7.55—Concert for Gustavus Adolphus Day. Station Orchestra and Uppsala Students' Choir. Address. **STUTTGART**, **DEUTSCHLANDSENDER**, **MUNICH**, News. 7.10—Variety Concert.

TOULOUSE, Light Music and Dance Music. 7.55—News. **TURIN**, 7.5—News. 7.40—Barison (violin), with Morossina Barison (Pfte.).

VIENNA, Light and Dance Music. Orchestra, Band, Quartet.

WARSAW, Talk. 7.15—"The Forester of Kozienica," Opera (Kurpinski).

8 p.m.

ATHLONE, A Programme from Rosmuc—from the University College, Galway.

BERLIN, HAMBURG, KÖNIGSBERG, Orchestra (contd.). **BEROMÜNSTER**, Scottish Songs and Duets (Wetzler). 8.30—Talk. 8.55—Music. **BRATISLAVA**, See Prague. 8.15—Comedy after Gruzinsky (Kunst). 8.35—Pfte. and Orchestra: Nights in the Gardens of Spain (Falla). **BRESLAU**, Variety (contd.)

BRUSSELS (1), Symphony Orchestra. Rachel Piette (Arias). **BRUSSELS (2)**, Record. 8.3—"Het Minnebrugje"—Operetta (Van Oost). **BUCHAREST** and **RADIO-ROMANIA**, "Andrea Chenier" (contd.). **BUDAPEST (1)**, From the Royal Opera (contd.).

COLOGNE, "Soldier - Comrades" (contd.).

DEUTSCHLANDSENDER, "A German Calendar — November" (Hansen).

EIFFEL TOWER, 8.30—Debussy Concert with Introduction. Songs. Pfte., Violin.

FRANKFURT, Theatre Excerpts (contd.).

HILVERSUM (1,875 m.). Band (contd.). 8.40—Talk. **HILVERSUM** (301.5 m.), Talk. 8.10—Mlle. Kaiser (Pfte.). 8.40—Talk.

KALUNDBORG, Festival Service (contd.). 8.40—"Cape Farewell" (Harry Martinson).

LEIPZIG, Music (contd.).

MONTE CENERI, Play (contd.). 8.35—Choir. **MUNICH**, Variety from Saarbrücken.

OSLO, Sketch. 8.25—Talk. 8.40—News.

PARIS (PTT), Talk. 8.30—"Mary Tudor"—Play (Victor Hugo). **POSTE PARISIEN**, 8.5—Paul Reboux. 8.20—Sketch. 8.55—To be announced. **PRAGUE**, Music (contd.). 8.15—Discussion. 8.35—See Bratislava.

RADIO - NORMANDIE, Concert. 8.30—Records. 8.45—Variety. **RADIO-PARIS**, Songs, Pfte. 8.30—News. 8.45—"Le jour et la nuit"—Opéra-bouffe (Lecocq). **ROME**, "The Cinema Girl" (contd.).

SOTTENS, Variety. 8.55—League of Nations. **STOCKHOLM**, Concert (contd.). 8.45—News. **STRASBOURG**. 8.30—See Paris (PTT). **STUTTGART**, Variety (contd.). 8.10—"Die Schicksalsbrücke über den Rhein" Play (Kanig).

TOULOUSE, News. 8.10—Light Music. 8.55—News. **TURIN**, Violin, Pfte. 8.20—Talk. 8.30—Light Orchestral.

VIENNA, Music (contd.).

WARSAW, Opera (contd.). 8.15—News; Topical. 8.30—Records.

9 p.m.

ATHLONE, "Fog in the Liffey"—Play (Milligan). 9.30—Variety.

BEROMÜNSTER, 9.5—News. **BRATISLAVA**, News. 9.15—News in Hungarian. 9.30—Records. **BRUSSELS (1)**, Talk. 9.15—Symphony Orchestra. Stany Paillot (Songs). (Hamilton Harty, Mozart, Handel, Strens, Delius). **BRUSSELS (2)**, Operetta (contd.). **BUCHAREST** and **RADIO-ROMANIA**, "Andrea Chenier" (contd.). 9.45—News (French, German, Romanian). **BUDAPEST (1)**, From the Royal Opera (contd.). 9.30—Jazz.

DEUTSCHLANDSENDER, News. 9.30—Italian Music. 9.45—Weather.

EIFFEL TOWER, Debussy (contd.).

HILVERSUM (1,875 m.), Talk. 9.10—N.C.R.V. Symphony Orchestra; at 9.40—News. **HILVERSUM** (301.5 m.), Talk. 9.10—Pfte. 9.40—Talk.

KALUNDBORG, News. 9.15—Light Music from the Ritz. **KÖNIGSBERG**, News. 9.20—Talk. 9.40—Dance and Light Music.

LEIPZIG, News. 9.30—"Kronstadt"—Sequence (Reimesch).

MONTE CENERI, 9.5—Records.

MUNICH, News. 9.20—Talk. 9.30—Songs. 9.45—Sonata in D for Two Pftes. (Mozart).

OSLO, Topical. 9.15—Male Voice Choir.

PARIS (PTT) and **STRASBOURG**, "Mary Tudor" (contd.). **POSTE PARISIEN**, To be announced. **PRAGUE**, News. 9.15—Ballet (Schmelzer). 9.45—News in Russian.

RADIO - NORMANDIE, Concert. **RADIO-PARIS**, "Le jour et la nuit" (contd.). **ROME**, "The Cinema Girl" (contd.).

STOCKHOLM, Light Orchestral. **STUTTGART** and **MOST GERMAN STATIONS**, News. 9.30—Light Opera Music.

TOULOUSE, News. 9.10—Fantasy. 9.45—Paris Programme. **TURIN**, Songs and Dances. 9.30—Notes. 9.40—Dance Music.

VIENNA, Music (contd.). 9.10—News, Esperanto Notes. 9.30—Quartet.

WARSAW, String Quartets (Purcell, Respighi). 9.30—Sketch. 9.45—Dance Music.

10 p.m.

ATHLONE, Variety. 10.30—News; Light Music.

BRUSSELS (1), News. 10.10—Records. 10.25—Accordion. **BRUSSELS (2)**, News. 10.10—Dance Records. **BUDAPEST (1)**, News in English. 10.5—Salon Orchestra.

DEUTSCHLANDSENDER. Dance Records.

HILVERSUM (1,875 m.), Orchestra (contd.). 10.10—Records. **HILVERSUM** (301.5 m.), Talk. 10.10—Records. 10.20—Service. 10.40—Notes.

KALUNDBORG, Variety (contd.). **KÖNIGSBERG**, Dance and Light Music.

LEIPZIG, Sequence (contd.). 10.30—Orchestra from Stuttgart.

MUNICH, Serenade — Band and Artists.

PARIS (PTT) and **STRASBOURG**, "Mary Tudor" (contd.). 10.30—News. **POSTE PARISIEN**, To be announced.

RADIO - NORMANDIE, Concert. **RADIO-PARIS**, "Le jour et la nuit" (contd.). **ROME** and **TURIN**, News. 10.15—Dance Music.

STUTTGART and **MOST GERMAN STATIONS**, Orchestra.

TOULOUSE, Paris Programme. 10.15—Selection, "The Love Parade" (Schertzinger). 10.40—Music. 10.55—News.

VIENNA, Quartet. 10.30—Notes. 10.40—Records.

WARSAW, Dance Music.

11 p.m.

BRUSSELS (2), Record. **BUDAPEST (1)**, 11.5—News.

FRANKFURT and **STUTTGART**, "Othello"—Opera (Verdi) by La Scala, Milan Cast (Recorded).

HILVERSUM (1,875 m.), Bible Reading. **HILVERSUM** (301.5 m.), Report on the Six Days' Cycle Race. 11.15—Records.

POSTE PARISIEN, To be announced.

RADIO - NORMANDIE, Dance Music. 11.30—From the Cabane Normande. **RADIO-PARIS**, Orchestra.

STRASBOURG, News in German. 11.15—Orchestra from Radio-Paris.

TOULOUSE, Songs and Dance Music. 11.55—News.

VIENNA, Records.

12 midnight

FRANKFURT and **STUTTGART**. "Othello" (contd.).

RADIO - NORMANDIE, Records. 12.30—Dance Music. **RADIO-PARIS** and **STRASBOURG**, Orchestra.

TOULOUSE, 12.5—Music. 12.30—Notes.

1 a.m. (Saturday)

FRANKFURT and **STUTTGART**. "Othello" (contd.).

PRINCIPAL EVENTS

SYMPHONY CONCERTS

6.0 Munich: Brahms pfte. concerto (Walter Frey).
6.30 Radio-Paris: Beethoven No. 2, etc.
7.55 Stockholm: "Gustav Adolf" festival.

LIGHT CONCERTS

1.50 Kalundborg: Hansen's Ensemble.
3.0 Deutschlandsender: Station orchestra.
5.0 Brussels 2; Radio Orchestra.
5.0 Leipzig, etc.: Popular programme.
7.0 Vienna: Light and dance music.
7.10 Athlone: Haydn Wood programme.
7.10 Berlin, Hamburg: Conductor, Lualdi.
7.10 Breslau: Variety concert.
7.20 Sottens: Variety concert.
8.0 Brussels 1: Orchestra, soprano arias.
8.30 Turin: Light orchestral.
9.0 Stockholm: Popular orchestral.
9.15 Kalundborg: Light music.
9.15 Oslo: Choir, men's voices.
9.30 Stuttgart, etc.: Light opera music.
10.5 Budapest 1: Salon orchestra.
11.0 Radio-Paris, Strasbourg: Bach, Sibelius.

OPERAS

6.30 Budapest 1: From the Opera.
7.15 Warsaw: "The Forester of Kozienica."
8.25 Regional: "Ariadne in Naxos."
11.0 Frankfurt, Stuttgart: "Othello" (rec.).

OPERETTAS

7.40 Rome: "The Cinema Girl."
8.3 Brussels 2: Flemish operetta (van Oost).
8.45 Radio-Paris: "Le jour et la nuit" (Lecocq).

CHAMBER MUSIC

4.0 Radio-Paris: The Zagreb Quartet.
8.30 Eiffel Tower: Debussy programme.
9.0 Warsaw: Purcell, Respighi.
9.30 Deutschlandsender: Italian music.

RECITALS

6.0 Budapest 1: Tarogato.
6.20 Vienna: Hugo Wolf Songs.
6.30 Brussels 1: Oscar Delvigne (pfte.).
7.10 Kalundborg: Church music.
7.40 Turin: Violin.
8.0 Beromünster: Scottish songs and duets.
8.0 Radio-Paris: Song, pianoforte.
10.25 Brussels 1: Accordion.

PLAYS

8.30 Paris (PTT), etc.: "Marie Tudor" (Hugo).
9.0 Athlone: "Fog in the Liffey."

LAST NEWS BULLETINS, See Monday

DANCE MUSIC

6.0 Deutschlandsender; 7.10, Leipzig; 9.40, Königsberg; 9.45, Warsaw; 10.0, Deutschlandsender; 10.10, Brussels 2; 10.15, Rome; 11.0, Radio-Normandie; 11.15, National, Regional.

NATIONAL

For Time Signals, see Monday

10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—The Child's Looks—Talk.
11.0—For the Schools; Music and Movement for Juniors. 11.20—Pfte. Interlude. 11.30—Music and Movement for Very Young Children.
11.0 (Scottish)—Records.
11.50—George C. Gray—Organ.
12.30 p.m.—BBC Dance Orchestra.
1.15—The Birmingham Philharmonic String Orchestra, Florence Hooton ('Cello).
2.0 (ex. Scottish)—Herring Bulletin.
2.0-4.0 (Scottish)—See Regional.
2.5 (ex. Scottish)—For the Schools; Travel Talks—Australia. 2.30—Coal. 3.0—English. 3.35—"Manchuria," Talk for Sixth Forms.
4.0—"Weingartner"—BBC Midland Orchestra, conducted by Leslie Heward.
5.15—The Continentals, presented by Boris Yvain, with Carmen del Rio.
6.0—The First News.
6.25—Mrs. Tobias Matthay (Poetry), Tobias Matthay (Pfte.).
7.0—Music and the Ordinary Listener—Sir Walford Davies.
7.30—"Richard Jeffries."
8.0—"White Coons"—Concert Party.
9.0—The Third News.
9.20—Talk—"Sea Power."
9.40—Florence Baga de Jong at the BBC Theatre Organ.
10.0—Commentary on Ladies' International Fencing Championship.
10.15—BBC Orchestra (Section E), conducted by Joseph Lewis; Dennis Noble (Baritone).
11.15—Roy Fox and his Band.

REGIONAL

For Time Signals, see Monday

10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—Sydney Gustard—Organ.
11.30—Cinema Orchestra.
12.30 p.m.—Falkman and his Apache Band.
1.15—Records, Variety.
1.45 (ex. Scottish)—BBC Northern Orchestra; Vera Jennings (Soprano).
1.45 (Scottish)—Gramophone Records.
2.0 (Scottish)—For the Schools; 2.5—Speech Training. 2.30—Concerts for Schools. 3.10—Nature Study. 3.35—Talk for Sixth Forms: "Manchuria."
2.45 (ex. Scottish)—Chopin Recital by Egerton Tidmarsh.
3.15 (ex. Scottish)—Records.
4.0—"What's the Odds?"
4.30—The Carlton Hotel Orchestra.
5.0—The Week in Westminster.
5.15—The Children's Hour.
5.35—Summary of the Week's News.
5.50 (Regional, Midland, Western)—Gramophone Records.
5.50 (Northern)—Duets by Doris and Harry.
5.50 (N. Ireland)—James Moody (Pfte.).
5.50 (Scottish)—Crué Davidson.
6.0 (ex. Western, Northern, Scottish)—Alfredo Campoli and his Orchestra; Glyn Eastman (Baritone).
6.0 (Western)—Reading.
6.0 (Northern)—Cecil Chadwick—Cinema Organ.
6.0 (Scottish)—Next Week You'll Hear; 6.10—Saturday Sport.
6.15 (Western)—Morriston Orpheus Choir; Tudor Davies (Tenor).
6.25 (Scottish)—Band and Pipes.
6.40 (Northern)—Talk on Gardening.
7.0—The Second News.
7.20—Regional Announcements.
7.30 (ex. Western, Northern)—Dance Band.
7.30 (Western)—Talk.
7.30 (Northern)—The Revue Orchestra.
7.50 (Western)—The North Regional Follies.
8.0 (Regional)—Gramophone Records.
8.0 (Midland)—The Midland Shopkeeper, by Colin Clark.
8.0 (Scottish)—BBC Scottish Orchestra, conducted by Ian Whyte.
8.0 (N. Ireland)—"Farmers' Work and Worry."
8.10 (Northern)—Popular Nonsense.
8.15 (N. Ireland)—The Harp Trio.
8.25 (Midland)—"Midland Organs and Organists." Henry Coleman.
8.25 (Regional, Northern, N. Ireland, Midland, Scottish, Western from 9.30)—"Ariadne in Naxos, from the Royal Opera House, Covent Garden.
8.30 (Western)—"Flood"—A Drama by W. Evan Williams.
8.30 (Scottish)—The Everlasting Heritage.
8.50 (N. Ireland)—Gramophone Records.
9.0 (Scottish)—Scottish Dance Music.
9.10 (Midland)—Margaret Ablethorpe (Pfte.).
10.50—News Summary.
11.15—Dance Band.
11.40—Peggie Sampson ('Cello).

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).
1.30-2.30 p.m.—Time; Weather; Stocks; Records. 5.30—Children's Hour. 6.15—Prizewinning Amateurs at the Microphone. 6.35—Irish News Feature. 6.45—Weather; Stocks; News; Time. 7.0—Look after your Garden, by G. O. Sherrard.
7.10—Haydn Wood Concert by the Station Orchestra. Eva Wilson (Songs). A Manx Rhapsody. Frescoes Suite.
7.45—Books.
8.0—A Programme from Rosmuc—from University College, Galway.
9.0—"Fog in the Liffey"—Play (Milligan). 9.30—Variety. 10.30—What happened to-day; Light Music.
11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.); 30 kW.
Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—Midday Echoes.
12.15 p.m.—See Frankfurt. 1.0—News. 1.15—Light Orchestral. 2.0—Exchange; Markets. 3.30—Sports.
4.0—Brahms and Haydn. Records.
4.30—"The River Oder"—(Pflug).
4.50—Health Hints.
5.0—See Leipzig. 6.0—Programmes.
6.20—Johann Strauss Records. 6.45—Evening Echoes. 7.0—News.
7.10—Station Orchestra. Conductor: Lualdi. Preludio gioçoso (Castagnone). Sinfonia (Cherubini). Serenade for Strings (Reznicek). Africa (Lualdi). Tango (Sonzogno). 9.0—News.
9.30-11.0—See Stuttgart.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).
5.30-5.50 a.m.—Ski-ing. 9.20-9.50—For Schools.
11.0-12.45 p.m.—See Sottens.
3.0—Music. 3.10—For Women. 3.30—Classical Music. Conductor: Gilbert. 3.50—Light Music. Radio Orchestra. Conductor: Bernhard.
4.20—Edelweiss String Band from Trogen. 5.0—Music.
5.30—For Children. 5.35—Legal Talk.
5.45 (from Berne)—Grieg Songs by Verena Peschl (Contralto). 6.0—Markets; Tourist Notes; Sports.
6.20—To be announced. 6.30—News.
6.40-9.5—Programme from Basle. 6.40—Basle Mandoline Double Quartet.
7.0—Dialect Programme with a Ländler Orchestra.
8.0—Scottish Songs and Duets (Wetzler) by Erica Frauscher (Soprano) and Kovacz (Baritone). The Composer at the Pfte.
8.30—Talk: Love Match or Marriage of Convenience? 8.55—Music. 9.5-9.15—News.

BORDEAUX-LAFAYETTE (France)

1,077 kc/s (278.6 m.); 12 kW.
Transmits at intervals from 6.50 a.m.
6.30 p.m.—News; Topical. 7.45—Talk: Antoine Bourdelle, Sculptor.
8.0—Spanish Lesson. 8.15—News.
8.25—"Monsieur Badin"—One-Act Play (Courteline). 9.0—Concert arranged by the St. Cecelia Association, from the Grand Theatre. Orchestra, Conductor: Poulet. Women's Choir. Wanda Landowska (Harpsichord) and Giraud (Soprano). Symphony in D (Mozart). Harpsichord and Orchestra: Concerto in B (Handel). Harpsichord: (a) Italian Concerto (Bach), (b) Concerto (Haydn). Soprano, Choir and Orchestra: A la musique (Chabrier). Spanish Rhapsody (Ravel).

BRATISLAVA (Czechoslovakia)

1,004 kc/s (298.8 m.); 13.5 kW.
Transmits at intervals from 5.15 a.m.
6.10 p.m.—Slovak Folk Songs by Flögl (Bass) with the Pihik Cigány Band.
6.35—Anna Janovska (Harp). Three Pieces (Tournier). Arabesque (Debussy). Air, "Mignon" (Thomas). 6.55—Band from Kosice.
7.35—See Prague. 8.15—Comedy after Gruzinsky (Kunst).
8.35—Nights in the Gardens of Spain (Falla) by Macudzinski (Pfte.) and the Station Orchestra. Conductor: Schimpl. 9.0—News; Review; Sports. 9.15—News in Hungarian.
9.30—Records. 10.0-10.15—See Brno.

BRESLAU (Germany)

950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).
Transmits at intervals from 4.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News.
12.15 p.m.—See Frankfurt. —1.0 News.
1.15—Variety, from Deutschlandsender. 2.0—Markets. 3.0—Books, including "The Fourth Seal" (Sir Samuel Hoare).
3.20—Pfte. Sonata in B flat minor (Chopin). 3.40—Review.
4.0—Orchestra from Hindenburg.
5.50—Programmes.
6.0—"Von Spee's Squadron"—an Epic of the Great War (Recorded).
7.0—News.
7.10—"Perpetuum mobile"—Variety from Saarbrücken. 9.0—News.
9.30-11.0—See Stuttgart.

BRNO (Czechoslovakia)

922 kc/s (325.4 m.); 32 kW.
Transmits at intervals from 5.15 a.m.
2.0 p.m.—Station Orchestra, Guest Conductor: Sprogis. The Watersprite (Dvořák). Symphony (Sprogis). Folk Dances (Sprogis).
3.0-3.45—See Prague. 3.45—Theatre Review. 3.50—See Prague. 4.40—Talk; Sports in German. 5.15—News. 5.20—Talk. 5.30—Labour Exchange. 5.35—For Workers. 5.45—See Prague. 6.10—Talk. 6.20-8.35—See Prague. 8.35—See Bratislava.
9.0—See Prague. 10.0-10.15—Morse.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.); 15 kW.
6.37-9.0 a.m.—Records; Gym; News.
12.0 noon—Records: The Months.
12.20 p.m.—Poems. 12.30—Salon Orchestra. Conductor: Féron. 1.0—News. 1.10—Belgian Music. Orchestra. Conductor: Walpot. Durand (Refrains). 1.30—Sibylle Essler (Songs). 1.40—Records. 2.0—Art Notes.
4.55—News. 5.0—Distate (Accordion).
5.30—Talk with Records: The Minuet. 6.0—Talk by M. Villers Léon.
6.15—Records.
6.30—Delvigne (Pfte.). Basso ostinato (Arensky). Prelude (Glazunov). Barcarolle (Tchaikovsky). Waltz in B minor (Amani). Impromptu in A (Scriabin). Prelude and Nocturne for the Left Hand (Scriabin). Carillon (Liapunov). 7.0—Talk: Electrical Combines in Belgium.
7.15—Mlle. Levaque (Songs). Aria, "Admeto" (Handel). Recitative and Aria, "L'enfant prodigue" (Debussy). 7.30—News.
8.0—Symphony Orchestra. Conductor: André. Rachel Piette (Arias). Overture (Rivier). Mélopées et rythmes (Bernier). Arias, "Lohengrin" (Wagner) and "The Damnation of Faust" (Berlioz). Les danseuses de Kerlouan (Daneau). Overture, "Le bourgeois gentilhomme" (Thiébaut). Columbia (Bosmans).
9.0—Talk: Agricultural Development.
9.15—Symphony Orchestra. Stany Paillot (Songs). Comedy Overture (Hamilton Harty). Arias, "The Magic Flute" (Mozart) and "Il Pensieroso" (Handel). Lyric Preludes (Strens). In a Summer Garden (Delius).
10.0—News. 10.10—Records. 10.25—Light Music. De Hollander (Accordion). 11.0—La Brabançonne.

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.
6.37-9.0 a.m.—Records; Gym; News.
12.0 noon—Records. 12.31 p.m.—Orchestra. Conductor: Walpot. 1.0—News. 1.10—Salon Orchestra. Conductor: Féron. 1.30—Mozart and Richard Strauss Records. 2.0—Shipping. 2.2-3.15—For Schools.
4.55—News. 5.0—Radio Orchestra. Conductor: Gason. In the interval: Records. 5.45—For Children. 6.25—Talk. 6.30—Flemish Music. Radio Orchestra. Conductor: Gason. 6.45—Talk.
7.0—Radio Orchestra. Conductor: Gason. Divertissement (Leemans). Serenade, Napoli (d'Ambrosio). Turkish March (Mozart). Polonaise (Chopin). Schubert Fantasia (Foulds).
7.30—Talk: Facial Hygiene. 8.0—Record: Mijne moedertaal (Brandts-Buys).
8.3—"Het Minnebrugje"—Operetta (Van Oost). Conductor: Walpot. In the interval: Talk.
10.0—News. 10.10—Dance Records.
11.0—Record: De Vlaamsche Leeuw (Miry).

BUCHAREST (Romania)

823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov), 160 kc/s (1,875 m.).
Transmits at intervals from 4.30 a.m.
4.0 p.m.—Reading. 4.15—Ionescu-Gaina Orchestra; at 5.0: Time; Markets; Topical. 6.0—Educational.
6.20—Talk.
6.35—"Andrea Chénier"—Opera in Four Acts (Giordano), on Records. In the Intervals: Topical Talk; News; Sports. 9.45—News (French, German, Romanian).

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.); 120 kW.
Transmits at intervals from 5.45 a.m.
11.5 a.m.—Records; at 11.30—News. 12.30 p.m.—Cigány Band.
1.40—News. 3.15—For Students.
4.0—Talk. 4.30—Station Orchestra; at 4.55: Sports. 5.30—Talk. 6.0—István Lugossy (Tarogato).
6.30—From the Opera. 9.30—Heinemann Jazz Band. Dobis (Songs).
10.0—News (English). 10.5—Pertis Salon Orchestra. 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.); 18 kW.
5.5 p.m.—Shorthand. 5.35—Schwalb (Pfte.). 6.40—Reading. 7.5—Records.
8.20—News.

COLOGNE (Germany)

658 kc/s (455.9 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News. 12.15 p.m.—Chamber Orchestra. 1.0—News. 1.15-2.0—Records: Folk Music. 2.45—Exchange. 3.0—Talks and Records.
5.0—Light Music. Station Orchestra. Conductor: Eysoldt, Cologne Pfte. Duo, Hanni Mack (Soprano), Schneider (Bass-Baritone). 6.45—Snapshots.
7.0—News.
7.10—"Soldier - Comrades." "von Spee's Squadron"—An Epic of the Great War (Recorded); Soldier Songs: "Where are you, Comrade?"
9.0—Time; News.
9.30-11.0—See Stuttgart.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.); 60 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—For all German Stations. Classical Music. Station Orchestra. Conductor: Clemens Krauss. Adele Kern (Soprano), Wittrisch (Tenor).
12.0 noon—Greetings.
12.15 p.m.—See Cologne. 12.45—News.
1.0—Variety. 2.0—Exchange; Programmes. 2.15—Children's Choir.
2.45—Labour Service Reunion (Recorded).
3.0—Station Orchestra. Conductor: Dobrindt; at 3.50: Topical. 4.50—Hitler Youth Music Day Concert, from Brunswick (Recorded).
5.20—Records of Famous Violinists.
6.0—Cabaret, with the Kaiser Dance Band, etc. 6.45—Events. 6.55—For Ex-Servicemen. 7.0—Motto; News.
7.10—See Stuttgart. 8.0—A German Calendar—November (Hansen). 9.0—News; Events.
9.30—Maria Heller (Harpsichord). Suite in G minor (Grieco). The Cuckoo (Pasquini). Sonata in D (Galuppi). 9.45—Weather.
10.0-11.0—Records of Favourite Dance Bands.

FRANKFURT (Germany)

1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg, and Trier, 1,195 kc/s (251 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News.
12.15 p.m.—Concert, from Coblenz.
1.0—News. 1.10—Opera Records.
2.0—Talk; Exchange. 2.15—Books.
2.30—"Leberecht Hühnchen tritt auf"—Sequence (Seidel). 3.0—Light Orchestral. In the interval: Reading.
4.30—We visit the Observatory. 4.45—"Chestnuts!"—(Gerhardt).
5.0—See Leipzig.
6.0—Records. Introduction and Allegro (Ravel). Spanish Rhapsody (Liszt-Busoni). Don Juan (R. Strauss).
6.40—Topical. 6.55—Exchange; Programmes. 7.0—Time; News.
7.10—A Tour of Trier, Constance, Coblenz and Giessen Theatres. Excerpts, "The Bartered Bride" (Smetana), "Der Bettelstudent" (Millöcker), "Tsar and Carpenter" (Lortzing), and "The Tsarevitch" (Lehár).
9.0—Time; News.
9.30—See Stuttgart.
11.0 p.m.-1.15 a.m. (Saturday)—"Othello"—Three-Act Opera (Verdi), by La Scala, Milan Cast, Conductor: Sabajno (Recorded).

HAMBURG (Germany)

904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg and Stettin, 1,330 kc/s (225.6 m.).
Transmits at intervals from 5.15 a.m.
11.10 a.m.—Concert from Deutschlandsender. 12.5 p.m.—Review.
12.15—"Bremen Stadtmusikanten"; Rinne (Clarinet). 1.0—News. 1.20—Music. 2.0—Exchange. 2.15—Shipping. 2.30 (from Bremen)—Kruschek (Violin), Hertzel (Baritone).
3.0—See Deutschlandsender; at 3.45: Talk. 4.30—Music Talk: Schaub.
5.0—Records. 5.45—Shipping. 6.0—"Automatic Machines"—Radio Picture. 6.45—Review. 7.0—News.
7.10—See Berlin. 9.0—News.
9.30-11.0—See Stuttgart.

FRIDAY (November 6)

HILVERSUM (1,875 m.) (Holland)

160 kc/s; 10 kW. until 2.40 p.m.; 100 kW. from 2.40 p.m.
N.C.R.V. Programme.
7.40-9.10 a.m.—Bible Reading; Meditation; Records. 10.10—Service
10.40—Seiverling ('Cello) and de Groot (Pfte.). 11.40—Announcements; Records.
12.10 p.m.—Van der Horst Ensemble.
1.40—Records. 2.10—Reading. 2.40-3.25—Mme. Oskam-van Rangelrooy (Soprano) and v.d. Vet (Pfte.).
3.40—Blaauw (Organ). 4.40—Hockstra (Recitations) and Records. 6.10—Talk; Announcements; Literary Review; Report. 7.40—News.
7.50—N.C.R.V. Wind Band. Conductor: v.d. Hurk. 8.40—Talk.
9.10—N.C.R.V. Symphony Orchestra. Conductor: v.d. Hurk: at 9.40: News. 10.10-11.10—Records; Bible Reading.

HILVERSUM (301.5 m.) (Holland)

995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
7.40 a.m.—V.A.R.A. Programme. Records.
9.40—V.P.R.O. Religious Programme.
9.55-11.40—V.A.R.A. Programme.
9.55—Recitations. 10.15—"Melody Circle." Conductor: Wins. 10.50—Recitations. 11.10—De Fliereffluiters. Conductor: v.d. Horst; Songs.
11.40 a.m.-3.40 p.m.—A.V.R.O. Programme. 11.40—Time; Records.
12.10—The Minstrels. In the interval: Palla (Organ). 1.50—Fashion Talk.
2.10—Veen (Pfte.).
2.55—A.V.R.O. Dance Band. Conductor: Mossel.
3.40-7.40—V.A.R.A. Programme. 3.40—Records. 4.40—For Children. 5.10—Jong (Organ). 6.10—Weekly Political Review. 6.30—Records; at 6.40-7.0—Talk. 7.30—News.
7.40-10.40—V.P.R.O. Programme. 7.40—Notes; Talk.
8.10—Mlle. Kaiser (Pfte.). 8.40—Talk.
9.10—Mlle. Kaiser (Pfte.). 9.40—Talk.
10.10—Records. 10.20—Service.
10.40-11.40—V.A.R.A. Programme.
10.40—Announcements; Report on the Six Days' Cycle Race. 11.15-11.40—Records.

KALUNDBORG (Denmark)

240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.).
Transmits at intervals from 6.0 a.m.
11.0 a.m.-1.0 p.m.—Andersen String Ensemble. 1.50—Hansen Instrumental Ensemble; at 2.35: For Women.
3.50—Wireless Notes. 4.0—Jørgensen's Lyrics. 4.25—Weather. 4.40—Exchange; Markets. 4.50—Petersen (Accordion). 5.15—Weather. 5.35—German Lessons. 6.0—News. 6.30—Scandinavian Review.
7.0—Carillon Recital from the Church of Our Saviour. Vor Fulsers Klokkesang. Reformation Hymns. Te Deum.
7.10—Festival Service for the Fourth Centenary of the Reformation in Denmark, from Copenhagen Cathedral. Copenhagen Boys' and Men's Choir. Orchestra. Conductor: Wöldike. Organ. 8.40—"Cape Farewell" (Harry Martinson). 9.0—News.
9.15-11.0—Light Music from the Ritz.

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)

1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News. 12.15 p.m.—See Frankfurt. 1.0—News. 1.10—Light Orchestral. 2.0—For Children.
2.25—Talk. 2.45—Concert on Records. 4.20—Portrait in Letters (arr. Finckenstein). 4.45—Report from the Trakehnen Stud. 5.0—Light Orchestral.
6.0—Announcements. 6.10—Call of Youth. 6.20—Danzig Youth talks about the Homeland. 6.45—Topical.
7.0—News.
7.10—See Berlin. 9.0—News. 9.20—Talk: Slav and Teutonic Villages and Towns.
9.40-11.0—Dance and Light Music Börschel Band

FRIDAY (November 6)

LAHTI (Finland)

166 kc/s (1,807 m.); 150 kW. Relayed by Helsinki, 895 kc/s (335.2 m.).
Transmits at intervals from 6.5 a.m.
4.0 p.m.—Talk. 4.25—Mandoline and Xylophone. 5.0—News (Finnish, Swedish). 5.15—Report. 5.40—Tauno Korhonen ('Cello). 6.0—Talk. 6.30—Radio Orchestra. Conductor: Haapanen. 7.45—News (Finnish, Swedish). 8.10-10.0—Classical Music.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News.
12.15 p.m.—See Frankfurt. 1.0—News.
1.15—Variety from Deutschlandsender. 2.0—For Women. 3.0—Records. 3.40—Exchange. 3.50—"Münchhausen"—Play (Ruckschcio); Games.
4.40—Talk: Germanic Gods.
5.0—Dresden Trio, Wehding (Pfte.), Putsche Band. 6.40—Talk: The Nation's Food. 6.50—Review. 7.0—News.
7.10—Dance Music and Light Music. Orchestras, Anny Oesterreicher (Coloratura-Soprano), Priem (Tenor).
9.0—News.
9.30—"Kronstadt"—Sequence (Reimesch).
10.30-11.0—Orchestra from Stuttgart.

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
8.30 p.m.—See Paris (PTT). 10.30—News.

LYONS (PTT) (France)

648 kc/s (463 m.); 100 kW.
Transmits at intervals from 6.50 a.m.
5.30 p.m.—Mlle. Chenu (Soprano). Zighera (Violin). Sonata (Handel). Frauenliebe und-Leben (Schumann). Intrada (Desplanes). Songs (Mussorgsky): (a) Trepak, (b) Berceuse, (c) Hopak. Le printemps (Milhaud). Caprice (Paganini - Kreisler). Réponse d'une epouse sage (Roussel). Chant hassidique (Milhaud). Spanish Dance (Granados-Thibaud).
6.30—News. 7.30—Request Records.
8.0—Talks.
8.30—See Paris (PTT). 10.30—News.
11.0—See Paris (Radio-Paris).

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.); 15 kW.
Transmits at intervals from 11.0 a.m.
7.50 p.m.—"La gran voce"—Five-Act Play (Frigerio).
8.35—La Melodia Choir. Si faccia silenzio (Mazzulani). Barcarolle (Campana). Alpine Song (Ghislanzoni). Carità (Rossini). Torna al mio amor (Tessaro).
9.5-9.15—Records: Folk Dances.

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg 1,267 kc/s (236.8 m.).
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News. 12.15 p.m.—Dance Band. 12.45—News.
1.0-2.0—See Deutschlandsender. 2.40—Augsburg Anecdotes. 3.0—Markets.
3.10—"Mary Stuart"—Biographical Sketch (Schleifer), with Music.
3.50—Chamber Music with the Station Choir. 4.45—Call of Youth. 4.50—Markets.
5.0—Light Orchestral; at 5.30: Topical.
6.0—Pfte. Concerto in D minor (Brahms) by Frey and the Station Orchestra. Conductor: Winter. 6.45—Talk: Unemployment. 7.0—News.
7.10—See Stuttgart. 8.0—"Perpetuum mobile"—Variety from Saarbrücken. 9.0—Time; News. 9.20—Talk: Olympic Victors. 9.30 (from Nürnberg)—Elisa Claron (Songs).
9.45 (from Nürnberg)—Sonata in D for Two Pftes. (Mozart).
10.0-11.0 (from Nürnberg)—Serenade—Weidig Band and Artists.

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 kc/s (222.6 m.); and Trondelag, 629 kc/s (476.9 m.
Transmits at intervals from 10.40 a.m.
4.0 p.m.—Concert. 5.0—English Lesson. 5.25—Recital by Inger Mikkelsen and Naalsund. 5.50—News. 6.30—Time: For Farmers.
6.45—Homme (Accordion). 7.0—Scandinavian Review.
7.25—Helga Lökke (Violin). Adagio and Fugue from the Sonata in G minor (Bach). Poème (Chausson).
8.0—Sketch. 8.25—Medical Talk.
8.40—News. 9.0—Topical. 9.15-9.45—Male Voice Choir.

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
7.0 p.m—News; Racing. 7.20—Foreign Affairs; Science Talk; Colonial Notes. 7.45—News. 7.55—Film Talk. 8.5—Home Affairs.
8.30—Debussy Concert with Introductory Talk. Germaine Cernay (Songs). Maillart-Verger (Pfte.) and Quesnel (Violin). Hommage à Haydn. Trois épigraphes antiques. Voiles. Des pas sur la neige. Ondine. Five Baudelaire Poems. Suite Bergamasque. Pfte. and Violin Sonata.

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
Transmits at intervals from 7.10 a.m.
12.0 noon—Exchange. 12.5 p.m.—Records. 12.39—Lecuona Cuban Boys.
1.19—Radio Amateur Prize-winners at the Microphone. 1.35—Records: Light Music. 2.0, 3.45, and 4.35—Exchange. 6.0—Call. 6.2—Topical.
6.9—Records. Overture, "Phèdre" (Massenet). Excerpt, "Tosca" (Puccini).
6.25—Talk. 6.30—Exchange. 6.35—For Women. 7.6—News. 7.30—The Week's Events. 7.37—Song Records. 7.52—Talk. 7.55—Song Records. 8.5—Paul Reboux.
8.20—"Under the Lamp"—Sketch (Diamant-Berger). 8.55-12.0 m't—To be announced.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m.
5.0 p.m.—Gluck Concert. Pasdeloup Concert Orchestra. Conductor: Cloez. Ballet, "Pans and Helen." Overture and Scene, "Orpheus."
5.30—Economics. 5.40—Talk arranged by the International Labour Office. 5.50—Literary Review.
6.0—Pasdeloup Concert Orchestra. Conductor: Cloez. Rosine Schor (Songs). Overture, "A Night in May" (Rimsky-Korsakov). Song without Words (Tchaikovsky). Flower Waltz (Tchaikovsky). Berceuse (Milhaud). Villanella (Berlioz). La Fauvette (Bénédict). Wiegenlied (Brahms). 6.30—News; Topical.
7.38—Suite pastorale (Chabrier) by the Pasdeloup Concert Orchestra. Conductor: Cloez. 8.0—Music Talk.
8.30—"Marie Tudor"—Play in Three Acts (Victor Hugo), by Comédie-Française Players; Production by Edmond Guiraud. 10.30—News.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
6.45 a.m.—Gym. 7.0—Records. 7.15—News. 7.45—Gym. 8.0—Records.
11.0—Chausson Records. 11.30—For Farmers. 11.45—Jewish Talk.
12.15 p.m.—Records; Dances of 1900. 12.45—News; For Ex-Servicemen. 1.0—Records. 1.15—Mme. Jeanne Andral (Songs). 1.30—Records of Famous French Instrumentalists.
2.0—Talk: Reminiscences of Paris.
2.15—Reading (Séverine). 2.30—Records. 3.0—Records: Symphonic Marches. 3.30—Talk: Marguerite de Valois. 3.45—Talk. 3.55—Review.
4.0—Chamber Music by the Zagreb Quartet. String Quartet (Odak). Quartet in E (Dvořák).
5.0—English Lesson. 5.20—Film Review.
5.30—Pasdeloup Concert Orchestra. Conductor: Cloez. Rosine Schor (Songs). Excerpts, "Tannhäuser" (Wagner). Songs (Grétry, Gaubert, Rossini, Büsser).
6.0—For Women: Notes; Gilberte Lyon (Pfte.). Prelude and Fugue (Bach). Impromptu in B flat (Schubert); Book Talk.
6.30—Pasdeloup Concert Orchestra. Conductor: Cloez. 2nd Symphony (Beethoven). Masques et Bergamasques (Fauré). Pastorale d'été (Honegger). Danse britannique (Florent Schmitt).
7.30—Theatre Review. 7.40—Hunting Notes. 7.50—Talk: Dietetics.
8.0—Marguerite Girard (Songs), Mlle. Dominique Jeanes (Pfte.). Part I: Songs. Le colibri (Chausson). D'une prison (Hahn). Mandoline (Debussy). Le bateau rose (Hüe). Part II: Pfte. Valse impromptu (Liszt). Waltz in A flat (Brahms). Soirée dans Grenade (Debussy). Dance, "La Vida breve" (Falla). Danse sauvage (Ralton).
8.30—News. 8.45—"Le jour et la nuit"—Three-Act Opéra-bouffe (Lecocq). Conductor: Labis.
11.0-12.45 a.m. (Saturday)—Station Orchestra. conductor: Rhenš-Baton. Estro armonico concerto (Vivaldi). Cantata, Ich habe genug (Bach). Suite, "Pelléas et Mélisande" (Sibelius). Concerto di camera (Barraud). Corsican Folk Suite (Martelli).

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.); 120 kW.
Transmits at intervals from 5.15 a.m.
2.0 p.m.—See Brno. 3.0—Exchange. Weather. 3.10—Dance Music from Moravská-Ostrava. 3.45—New Poetry.
3.50—String Quartet in D (Franck) by the Ondricek Quartet. 4.40—Recitations. 4.50—Markets. 5.0—For Workers. 5.10—Talks in German.
5.45—News and Art Review in German. 6.0—News. 6.10—Review. 6.20 Folk Songs by Stepánová (Mezzo-Soprano).
6.40—"Brewers"—Two-Act Comedy (Erben), with Music by Vorel. 7.35—Light Music and Dance Music from Kosice. 8.15—Discussion: Soviet Youth.
8.35—See Bratislava. 9.0—Time; News. 9.15—Ballet (Schmelzer). FOC Orchestra. Conductor: Smetacek. 9.45-10.0—News in Russian.

Arthur van Oost, composer of the operetta which Brussels No. 2 broadcasts (8.3 p.m.)

RADIO CÔTE D'AZUR (Juan-les-Pins) (France)

1,276 kc/s (235.1 m.); 27 kW.
Transmits at intervals from 12.15 p.m.
6.15 p.m.—Spanish Lesson. 7.0—Light Orchestral. 7.25—Amusements; For Children. 7.30—Sports. 8.0—News. 8.15—Variety. 8.30—Light Music. 10.0—News. 10.15—Dance Music.

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Band; at 7.10: News. 8.0—Jack Savage and his Cowboys. 8.15—Records. 8.30—Songs. 9.0—Records. 9.15—Light Music. 9.30—Records. 10.0—Light Music. 10.15—Records. 10.30—Popular Music. 10.45—Records.
11.0—Classical Music. Unfinished Symphony in B Minor (Schubert). Spanish Symphony (Lalo). Concerto in A Minor (Schumann).
12.0 noon—Records. 12.40 p.m.—News. 1.0—Concert. 2.0—Records.
2.30—Dance Music. 3.0—Light Music. 3.30—Cinema Organ.
3.45—Concert. 4.45—For Children.
5.0—Records. 5.15—Light Music.
5.30—London Music. 5.45—Light Music. 6.0—Children's Corner. 6.45—Talk; Racing. 7.0—Concert. 7.40—News.
8.0—Concert. 8.30—Records. 8.45—Variety. 9.0—Concert. 11.0—Dance Music. 11.30—From the Cabane Normande. 12.0 m't—Records. 12.30-1.0 a.m. (Saturday)—Dance Music.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2), and Turin (No. 2), 1,357 kc/s (221.1 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15—4.50—See Turin. 5.50—Dopolavoro Notes. 6.0—Records; News and Talk in Dutch.
6.20—News in Foreign Languages.
7.5—Time; News. 7.30—Government Notes. 7.40—"The Cinema Girl"—Three-Act Operetta (Weinberger). Conductor: Lombardo. In the intervals: Talks. 10.0—News.
10.15-11.0—Dance Music.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 5.0 a.m.
5.0 p.m.—Songs. 5.20—Light Music.
5.40—Pfte.
6.20—Symphony Concert; at 6.50: Talk. 7.45—News. 8.0-9.0—Light Music and Dance Music; at 8.35: Notes.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.—Radio Suisse romande Orchestra. Conductor: Haug. Overture, "Cosi fan tutte" (Mozart). Symphony in B flat (Haydn).
11.30—News. 11.40—Viennese Folk Music (Komzak) by the Radio Suisse romande Orchestra. Conductor: Haug. 12.0 noon—Orchestra. 12.45-1.0 p.m.—Financial Report. 3.29—Time.
3.30-5.0—See Beromünster.
5.0—Interlude. 5.15—Bridge Lesson.
5.30—Announcements. 5.35—Sports.
5.50—For Alpinists. 6.0—Parliamentary Notes. 6.15—Radio Magazine.
6.50—News.
7.0-9.15 (approx.)—Programme from Geneva. 7.0—Financial Report.
7.20—Variety. Engel Orchestra and Artists; at 7.45-8.15—Casino Theatre Troupe. 8.55—League of Nations Report.

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.), and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
7.0 p.m.—Björling Vocal Quartet.
7.30—Talk.
7.55—Concert for Gustavus Adolphus Day. Station Orchestra. Conductor: Grevillius. Uppsala Students' Choir. Festival Overture (Norman). Address, Choir. Overture (Nicolai). Threnody (Boltzius). Royal Hymn (Liljefors). Hymn (Alfvén).
8.45—News.
9.0-10.0—Popular Orchestral. Conductor: Grevillius. Selection, "The Tsarevitch" (Lehár). London Suite (Coates). Irish Melody (Grainger). Molly on the Shore (Grainger). Spanish Serenade (Glazunov). Selection, "Oh, Kay" (Gershwin).

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
8.30 p.m.—See Paris (PTT). 10.30—News. 11.0—News in German.
11.15 p.m.-12.45 a.m. (Saturday)—Concert, from Paris (Radio-Paris).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
Transmits at intervals from 5.0 a.m.
11.0 a.m.—See Deutschlandsender.
12.0 noon—News.
12.15 p.m.—See Frankfurt.
1.0-2.0—See Deutschlandsender. 2.30—Fairy Play.
3.0—See Deutschlandsender; at 3.50: Talk.
4.30—Trenkner Songs by Maria Caroni, the Composer at the Pfte.
5.0—"Round the World in Sixty Minutes"—Records. Music of Sweden, Norway, France, England, Italy, Hungary, Czechoslovakia, Poland, Romania, Mexico, The Argentine and U.S.A. 6.0—Wonders of the Universe (III).
6.20—Ballads (arr. Scholler). 6.45—Talk. 7.0—News.
7.10—Variety Concert—Station Orchestra and Artists.
8.10—"Die Schicksalsbrücke über den Rhein"—Play (Kanig). 9.0—Time; News.
9.30—Station Orchestra. Conductor: Schröder. Overture, "Der Schauspieldirektor" (Mozart). Ballet, "Les petits riens" (Mozart). Tarantella (Auber). Overture, "Undine" (Lortzing). Selection, "Madame Butterfly" (Puccini). Waltz (Richarte). Ballet, "Les millions d'Arlequin" (Drigo). Song without Words (Tchaikovsky). Czardas, (Strauss). March (Haller-Goettler).
11.0 p.m.-1.0 a.m. (Saturday)—See Frankfurt.

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
7.55 p.m.—News. 8.10—Song Duets.
8.25—Orchestra.
8.40—Excerpts, "Faust" (Gounod).
8.55—News. 9.10—Successes of Yesterday and To-day—Fantasy. 9.45—Paris Programme. 10.15—Selection, "The Love Parade" (Schertzinger).
10.40—Viennese Orchestra. 10.55—News.
11.0—Operetta Songs.
11.15—Dance Music. 11.40—Chansonnettes. 11.55—News. 12.5 a.m. (Saturday)—Light Music. 12.20—Hunting Horns. 12.30—Announcements.

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
Transmits at intervals from 6.45 a.m.
4.0 p.m.—News. 4.15-4.50—Angelini Dance Band. 5.50—Dopolavoro Notes. 6.0—News in Foreign Languages. 7.5—News. 7.30—Government Notes.
7.40—Cesare Barison (Violin), with Morosina Barison (Pfte.). Concerto in D minor (Tartini). Le streghe (Paganini). Poupée valsante Poldin-Kreisler). Nocturne (Boulanger). Caprice (Wieniawski). 8.20—Talk.
8.30—Songs and Dances. Conductor: Barzizza. 9.30—Announcements.
9.40-11.0—Light Orchestral; at 10.0: News.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s (578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
Transmits at intervals from 6.0 a.m.
6.0 p.m.—Time; News.
6.20—Wolf Songs by Duhan (Baritone) and Patzak (Tenor). Wenn ich in deine Augen seh'. Du bist wie eine Blume. Mädchen mit dem roten Mündchen. Spätherbstnebel. Mit schwarzen Segeln. Sterne mit den goldnen Füsschen. Wie des Mondes Abbild zittert. Ein Grab. Ständchen. Andenken. Nach dem Abschiede. Ja, die Schönst', ich sagt' es offen. Auf der Wanderung.
7.0—Light and Dance Music. Station Orchestra. Conductor: Holzer. Mathé Band, "Modernes." Quartet. 9.10—News.
9.20—Esperanto Notes.
9.30—Wolferl Quartet. 10.30—Announcements. 10.40-12.0 m't—Records.

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.) Poznań 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
Transmits at intervals from 5.30 a.m.
11.3 a.m.—Records of Armand Grabbe (Baritone) and John McCormack (Tenor). 11.40—Talk. 11.50-12.0 noon—News. 2.0 p.m.—Economics.
2.15—Station Orchestra and others. Conductor: Górzyński. 2.55—Holiday Hints. 3.0—Film and Art Review.
3.10—Talk. 3.15 (from Lwów)—For Invalids.
3.30—Cracow Station Quartet Marche lorraine (Ganne). Waltz (Strauss). Aria, "Iolanthe" (Tchaikovsky). Minuet (R. Strauss-Wilnet). Spanish Dance (Albéniz-Peters). Prelude (Prosnak-Macalik). Bolero (Moszkowski).
4.0—Reading.
4.15—Blaschke ('Cello), Korwin-Krukowska (Songs). 'Cello: (a) Largo (Handel), (b) Romance (Debussy), (c) Les cloches (Debussy). Songs (Zelenski, Gall). 'Cello: (a) Reigen (Popper), (b) Pavane (Ravel), (c) Scherzo (van Goens). Songs (Cui, Niewiadomski, Moniuszko).
4.50—Topical. 5.0—Sports. 5.20—Notes. 5.50—For Farmers. 6.0—Reading. 6.20—Songs.
6.45—Opera Excerpt. 7.0 (from Poznań—Talk: Orchestral Instruments.
7.15 (from Lwów)—"The Forester of Kozienica"—Opera (Kurpinski).
8.15—News; Topical. 8.30—Records: Light Music.
9.0—Warsaw String Quartet. Chaconne (Purcell). Doric Quartet (Respighi).
9.30 (from Poznań)—Sketch. 9.45—Dance Music.

2 p.m.

BRUSSELS (1), 2.45 — Records: "Manon" (Massenet).
PARIS (PTT), 2.30 — Concert for Hospitals.

3 p.m.

BRATISLAVA, 3.45—For Children.
BRUSSELS (1), Records: "Manon" (contd.). **BRUSSELS** (2), Antwerp Scala Orchestra. 3.45—Talk.
COLOGNE, Light Orchestral; at 3.45—Books.
DEUTSCHLANDSENDER, "Something for Everybody"—Records.
HILVERSUM (1,875 m.), For Children. 3.40—Jewish Religious Programme. **HILVERSUM** (301.5 m.), Chess. 3.10—Dance Band. 3.30—Talk.
KALUNDBORG, Radio Orchestra. 3.56—Poem.
MONTE CENERI, BEROMÜNSTER and **SOTTENS**, 3.30—Dance Music from the Kursaal, Lugano. **MUNICH** and **MOST GERMAN STATIONS**, "For Young and Old"—Popular Music.
PARIS (PTT), Concert for Hospitals (contd.). 3.30—Talk. 3.50—Elisabeth Kotlaroff (Songs). **PRAGUE**, 3.5—Orchestra. 3.45—For Children.
RADIO-NORMANDIE, Light Music. 3.30—Records. 3.45—Jack Savage and his Cowboys. **RADIO-PARIS**, For Children.
STOCKHOLM, 3.5—For Children. 3.35—Norwegian Music, by Mary Barratt-Due (Pfte.).
VIENNA, Vienna Schubert Society and Lyric Quartet. 3.20—News. 3.25—Talks.
WARSAW, 3.15—Inauguration of the New Radio Station at Wilno. Addresses; Songs by Contemporary Wilno Composers.

4 p.m.

BRATISLAVA, For Children. 4.35—Reviews. **BRNO**, 4.40—Hunting and Drinking Songs in German. **BRUSSELS** (1), Records, "Manon" (contd.). 4.55—News. **BRUSSELS** (2), Liszt Festival, Concert from Antwerp. Royal Flemish Conservatoire Choirs and Orchestra; the St. Cecilia Choir. Conductor: de Vocht. **BUCHAREST** and **RADIO-ROMANIA**, Military Band. **BUDAPEST** (1), 4.50—Daisy Guth (Pfte.).
COLOGNE, Light Orchestral.
DEUTSCHLANDSENDER, "Something for Everybody"—Records.
HILVERSUM (1,875 m.), Jewish Religious Programme. 4.40—K.R.O. Boys; Records. **HILVERSUM** (301.5 m.), Talk. 4.10—Play. 4.40—V.A.R.A. Orchestra.
KALUNDBORG, Talk. 4.40—Exchange. 4.50—Records.
MONTE CENERI, BEROMÜNSTER and **SOTTENS**, Talk. 4.10—Orchestra; 'Cello (Paisiello, Boccherini, Mozart, Beethoven). **MUNICH** and **MOST GERMAN STATIONS**, "For Young and Old" (contd.).
OSLO, Records.
PARIS (PTT), Marius Casadesus (Violin); Suzette Delfaud (Pfte.). 4.30—Pasdeloup Concert. **PRAGUE**, For Children. 4.35—Talks. 4.55—Sports (in German).
RADIO-NORMANDIE, Concert. 4.45—For Children. **RADIO-PARIS**, Light Music by the Pascal Orchestra.
STOCKHOLM, 4.5—The Ceremony of the Chairing of a Professor at Uppsala University. **STRASBOURG**, 4.30—See Paris (PTT).
TURIN and **ROME**, News. 4.15—Dance Music. 4.55—Talk.
VIENNA, 4.5—Records.
WARSAW, Service. 4.50—Books.

5 p.m.

ATHLONE, 5.30—Programmes. 5.45—Tea-Time Music—Wood Wind Ensemble and Song Records.
BERLIN, Sports. 5.15—"Elisabeth Tabor"—Play with Music (Borck-Mattausch). **BEROMÜNSTER**, Talk by Felix Moeschlin. 5.30—Music. 5.40—Talk: The British Empire and India. **BRATISLAVA**, Hungarian Transmission. Talk; Two Plays. **BRESLAU**, Talk. 5.20—"Youth travels to a foreign Land"—Sequence (Müller). 5.50—Programmes. **BRNO**, German Songs (contd.). 5.15—News; Reviews. **BRUSSELS** (1), Talk. 5.15—Dance Band. **BRUSSELS** (2), Liszt Festival Concert (contd.). 5.30—Quartet in A minor (Béla-Bartók) (Records). **BUCHAREST** and **RADIO-ROMANIA**. Topical. 5.15—Dances. **BUDAPEST** (1), Daisy Guth (Pfte.). 5.30—Radio Competition Results.
COLOGNE, Programmes. 5.5—Lecture Recital: Popular Instruments. 5.30—Male Voice Choir.
DEUTSCHLANDSENDER, Folk Songs and Dances. 5.40—Weekly Sports Bulletin.
FRANKFURT, Marches on Opera Themes. 5.45—Lincke's Seventieth Birthday—Lecture Recital (Recorded).
HAMBURG, Light Music and Dance Music. **HILVERSUM** (1,875 m.), K.R.O. Boys; Records. 5.25—For Scouts; Records. **HILVERSUM** (301.5 m.), V.A.R.A. Orchestra. 5.20—Talk. 5.40—Organ; Songs.
KALUNDBORG, Records. 5.15—Weather. 5.35—French. **KÖNIGSBERG**, Lincke Records.
LEIPZIG, Talk. 5.15—Folk Songs.
MUNICH, Light Music by the Augsburg Dance Band. 5.50—"Hitler Youth greets old Members of the National Socialist Movement."
OSLO, For Children. 5.30—Economics. 5.50—News.
PARIS (PTT), and **STRASBOURG**, Pasdeloup Concert. **PRAGUE**, German Transmission. Talk; Folk Songs. 5.45—News (German).
RADIO-NORMANDIE, Records; Light Music. **RADIO-PARIS**, Literary Review. 5.15—Talk. 5.30—Records: Italian Bel Canto.
SOTTENS, Chimes. 5.10—For Children. **STOCKHOLM**, From Uppsala University (contd.). 5.10—Records. **STUTTGART**, Weekly Sound News. 5.30—Alemanic Folk Music by the Berne Yodelling Club.
TURIN and **ROME**, Talk. 5.10-5.40—Rural Programme. 5.50—Dopolavoro Notes.
VIENNA, Folk Songs and Viennese Music. 5.30—Foreign Affairs.
WARSAW, Topical.

6 p.m.

ATHLONE, Tea-time Music (contd.). 6.35—Irish News Feature. 6.45—News.
BERLIN, Romantic Music (Schumann, Chopin, Wetzel, Fuchs). 6.45—Evening Echoes. **BEROMÜNSTER**, Chimes; Markets. 6.20—Opera Music. 6.30—News. 6.40—"Wannsee, November 23rd, 1811"—Sequence about Kleist (Schirokauer). **BRESLAU**, Concert on Records. 6.45—Sound News. **BRUSSELS** (1), Labour Office Report. 6.15—Symphony Orchestra; Mme. Schreiden-Funcken (Pfte.). (Mozart, Grieg, Mendelssohn). **BRUSSELS** (2), Talk. 6.15—Records. 6.45—Talk. **BUCHAREST** and **RADIO-ROMANIA**, Talk; Dances. **BUDAPEST** (1), Station Orchestra.
COLOGNE, Kleist—Dramatic Programme. 6.45—Snapshots.
DEUTSCHLANDSENDER, "From Brasserie to Dance Hall"—A Trip round Berlin. Sound News in the interval. 6.45—Topical.
FRANKFURT, "Lincke's Seventieth Birthday" (contd.). 6.30—Reviews.
HAMBURG, Songs and Music by Village Youth. 6.25—Talks. **HILVERSUM** (1,875 m.), Press Review; Records; Police Messages. **HILVERSUM** (301.5 m.), Organ; Songs. 6.10—A Radio Film. 6.40—V.R.O. Talk.
KALUNDBORG, News. 6.30—Discussion. **KÖNIGSBERG**, Local News. 6.10—Talk. 6.30—"Where are you, Comrade?"
LEIPZIG, "An Evening with Chopin"—Sketch (Hänsler) with Blumer (Pfte.).
MONTE CENERI, Records. 6.15—Review. 6.30—Records. 6.45—News. **MUNICH**, "Hitler Youth greets old Members of the National Socialist Movement" (contd.). 6.20—Talk. 6.30—Gigli Records. 6.40—Novellette in D (Schumann). 6.50—Topical.
OSLO, News. 6.30—Station Orchestra.
PARIS (PTT), Pasdeloup Concert. 6.30—News. **POSTE PARISIEN**, Call; Roman Catholic Review; Records. 6.30—Exchange; Dialogue Song Records. 6.47—Foreign Affairs. **PRAGUE**, News. 6.15—Light Music and Dance Music.
RADIO-NORMANDIE, Children's Corner. 6.40—Talk; Racing. **RADIO-PARIS**, Economics. 6.30—Records. **ROME**, Records; Talk in Esperanto. 6.20—News in Foreign Languages.
SOTTENS, A Radio Film. 6.50—News. **STOCKHOLM**, Sketch (Svensk). 6.30—Old Dance Music. **STRASBOURG**, See Paris (PTT). 6.30—News. **STUTTGART**, Records: Popular Music.
TOULOUSE, Songs; Orchestra; Light Music. 6.55—News; Sports.
TURIN, News in Foreign Languages.
VIENNA, News. 6.15—Franz Wagner (Pfte.) (Schumann, Schubert, Chopin).
WARSAW, For Poles Abroad. 6.30—Light Orchestral.

7 p.m.

ATHLONE, Interview. 7.15—Michael O'Gallaghan (Songs). 7.25—The new President of America by M. Barrow. 7.40—Slices of Life.
BERLIN, News. 7.10—Non-Stop Variety Concert. **BEROMÜNSTER**, Sequence about Kleist (contd.) 7.40—The Zürich Radio Ball. **BRUSSELS** (1), Orchestra and Pfte. (contd.). 7.15—Reviews. 7.30—News. **BRUSSELS** (2), Lecture-Recital: Walloon Folk Songs. 7.30—News. **BUCHAREST** and **RADIO-ROMANIA**, Letters, 7.25—Radio Dance Band. **BUDAPEST** (1), Three One-Act Plays. 7.55—News.
DEUTSCHLANDSENDER, News. 7.10—Paul Lincke Concert for the Composer's Seventieth Birthday.
HAMBURG, News. 7.10—"Frau Luna"—Operetta (Lincke). **HILVERSUM** (1,875 m.), Talk. 7.15—Topical; News; Prayer; Records. **HILVERSUM** (301.5 m.), V.R.O. Talk. 7.40—News. 7.55—Records.
KALUNDBORG, String Quartet in A minor (Mendelssohn). 7.30—Weekly Review. 7.40—Radio Ball for the Younger Generation.
KÖNIGSBERG, BRESLAU, COLOGNE, FRANKFURT, LEIPZIG and **STUTTGART**, News. 7.10—"Mariellche in the Land of Lakes and Elks"—Play with Music (Reisner-Börschel).
LILLE, Music-Hall. 7.30—Records.
MONTE CENERI, To be announced. **MUNICH**, News. 7.10—Lincke's Seventieth Birthday—Lecture-Recital (Recorded). 7.50—Munich Humour and Variety.
OSLO, Station Orchestra; at 7.5, Talk. 7.45—Soirée arranged by the Authors' Association.
PARIS (PTT), Review. 7.38—Talk. 7.45—Simone Jacsont (Pfte.). **POSTE PARISIEN**, 7.2—Records; Sports. 7.10—News; Amusements. 7.30—Records. 7.45—Film Music. **PRAGUE**, Discussions with Listeners. 7.15—Military Band.
RADIO-NORMANDIE, Concert. 7.40—News. **RADIO-PARIS**, Waltz Records. 7.30—Talk. 7.45—Racing. **ROME**, 7.5—Time; News. 7.30—Talk. 7.40—"Gente in treno"—One-Act Play (Giannini).
SOTTENS, Weekly Sound News. 7.30—French Contemporary Music—Radio Suisse romande Orchestra. Maurice Perrin (Pfte.). (Mompou, Honegger, Ribier, Poulenc, Ravel). **STOCKHOLM**, Old Dance Music. 7.15—Report. **STRASBOURG**, Review. 7.30—News (French, German).
TOULOUSE, Light Music. **TURIN**, 7.5—Time; News. 7.30—Talk. 7.40—Excerpts, "Consuelo"—Opera (Rendano).
VIENNA, Franz Wagner (Pfte.). 7.25—"Civil and Military"—Station Orchestra and Military Band.
WARSAW, Polish Folk Songs. 7.30 Reading. 7.45—News; Topical.

8 p.m.

ATHLONE, Slices of Life. 8.10—Accordion Quartet. 8.30—Station Orchestra.
BERLIN, Variety Concert (contd.). **BEROMÜNSTER**, The Zürich Radio Ball (contd.). **BRUSSELS** (1) Lully Records. 8.15—"L'Ecole des Femmes"—Five-Act Comedy (Molière). **BRUSSELS** (2), "De Blinkende Zonnekloppers" (Cabaret). **BUCHAREST** and **RADIO-ROMANIA**, Radio Dance Band; at 8.30—News. **BUDAPEST** (1), News. 8.15—Budapest Concert Orchestra.
DEUTSCHLANDSENDER, Paul Lincke Concert (contd.).
EIFFEL TOWER, 8.30—Greek Classics: (a) "The Seven against Thebes"—Tragedy (Eeschylus); (b) "Batrachomyomachia" (Homer).
HAMBURG, "Frau Luna" (Lincke) (contd.). **HILVERSUM** (1,875 m.), Records. 8.25—K.R.O. Orchestra and Operetta Choir; Ellen Schwarz (Soprano); Vos-Mendes (Tenor). **HILVERSUM** (301.5 m.), Records. 8.30—Talk. 8.40—V.A.R.A. Theatre Orchestra.
KALUNDBORG, Radio Ball (contd.); at 8.50—Talk. **KÖNIGSBERG, BRESLAU, COLOGNE, FRANKFURT, LEIPZIG** and **STUTTGART**, "Marjellche in the Land of Lakes and Elks" (contd.).
LILLE, Sports. 8.15—For Housewives. 8.30—Dramatic Programme.
MONTE CENERI, Opera Programme. 8.45—Talk. **MUNICH**, Munich Humour and Variety (contd.).
OSLO, Authors' Association Soirée (contd.). 8.40—News.
PARIS (PTT), Films; Economics. 8.20—Reading. 8.30—Popular Concert. National Orchestra. André Asselin (Violin); Françoise Holney (Songs). **POSTE PARISIEN**, Paul Reboux. 8.15—Light Music. 8.30—Songs. **PRAGUE**, Programme for the Soviet Russian State Holiday. Orchestra and Recitations.
RADIO-NORMANDIE, Records. 8.20—Operatic Music. 8.40—Classical Music. The Pastoral Symphony (Beethoven); Sonata (Saint-Saëns). **RADIO-PARIS**, Simone Sorelli (Songs); Marguérite Delcourt (Harpsichord). 8.30—News. 8.45—Concert version, "On ne badine pas avec l'amour"—Opéra-Comique (Pierné). **ROME**, One-Act Play (contd.). 8.10—Orchestral Concert. Pierangeli (Violin).
SOTTENS, French Contemporary Music (contd.). 8.50—Alexander Dance Band. **STOCKHOLM**, Cabaret. 8.45—News. **STRASBOURG**, Sports. 8.20—Press Review (German). 8.30—One-Act Plays: (a) "Le Bal"—in Verse (Regnard); (b) "Les deux Clochards" (Maxime-Léry).
TOULOUSE, News; Band. 8.25—Excerpts, "I Pagliacci" (Leoncavallo). 8.40—Dance Music. 8.55—News. **TURIN**, Excerpts, "Consuelo" (Rendano) (contd.). 8.55—Talk.
VIENNA, Civil and Military (contd.). 8.50—Films.
WARSAW, Finnish Music — Minna Talvik-Palmgren (Songs); Selim Palmgren (Pfte.). 8.35—Song Records.

9 p.m.

ATHLONE, Station Orchestra. 9.30—Variety.
BERLIN, News. 9.20—Commentary on the Swimming Contest, Vienna v. Berlin, in Vienna. 9.30—See Leipzig. **BEROMÜNSTER**, Zürich Radio Ball (contd.); at 9.5-9.15—News. 9.45—Parliamentary Review. **BRESLAU**, News. 9.30—Dance Band. **BRUSSELS** (1), "L'Ecole des Femmes" (Molière) (contd.). **BRUSSELS** (2), Report: A Walk round Mons. 9.15—Light Orchestral; Peterman (Bassoon). **BUCHAREST** and **RADIO-ROMANIA**, Radio Dance Band. 9.45—News (French, German, Romanian). **BUDAPEST** (1), Budapest Concert Orchestra. 9.45—Dance Records.
COLOGNE, News. 9.20—Report: Opening of the Krefeld Hindenburg Skating Rink. 9.35—Variety Concert from Leipzig.
DEUTSCHLANDSENDER, News; Topical. 9.30—Intermezzo and two Scandinavian Melodies (Grimm), by Seiler (Viola) and the Composer (Pfte.).
EIFFEL TOWER, Greek Classics (contd.).
HILVERSUM (1,875 m.), Orchestra, Chorus and Songs (contd.). **HILVERSUM** (301.5 m.), Orchestra (contd.). 9.10—Ramblers Dance Band. 9.35—Announcements; Report.
KALUNDBORG, News; Radio Ball (contd.). **KÖNIGSBERG**, News. 9.20—Report: Judging the Ten Best Athletes of East Prussia. 9.35—Serenade.
LEIPZIG, FRANKFURT, HAMBURG, News. 9.30—Variety Concert. **LILLE**, Dramatic (contd.).
MONTE CENERI, Folk Dances; Jazz Band. **MUNICH**, News. 9.30—Dance Band.
OSLO, Topical. 9.15—Old Dance Music. 9.45—Dance Records.
PARIS (PTT), Symphony Concert (contd.). **POSTE PARISIEN**, "La Chanson du tiroir" (Nohain-Delettre). 9.45—U.S.A. Bulletin from New York. **PRAGUE**, News. 9.15—Records. 9.30—Dance Music.
RADIO-NORMANDIE, Classical Music (contd.). **RADIO-PARIS**, "On ne badine pas avec l'amour"—Opera (Pierné) (contd.). **ROME**, Symphony Concert (contd.).
SOTTENS, Alexander Dance Band. **STOCKHOLM**, Station Dance Band. **STRASBOURG**, One-Act Plays (contd.). **STUTTGART**, News. 9.30—Records.
TOULOUSE, News. 9.10—"Croisières"—Fantasy. 9.45—Paris Programme. **TURIN**, Talk. 9.5—Viganelli (Organ).
VIENNA, Films. 9.10—News. 9.20—Commentary on the Swimming Contest, Berlin v. Vienna. 9.50—Jazz Band; Refrains.
WARSAW, To be announced. 9.30—Dance Band.

10 p.m.

ATHLONE, Variety. 10.30—News; Light Music.
BRESLAU, Dance Band. **BRUSSELS** (1), News. 10.10—Brenders Jazz Band. **BRUSSELS** (2), News. 10.10—Quartets (Borodin, Haydn) by the Brussels Quartet. **BUDAPEST** (1), Dance Records.
DEUTSCHLANDSENDER and **STUTTGART**, Kaiser Dance Band.
HILVERSUM (1,875 m.), Orchestra Chorus and Songs (contd.). 10.10—News, Sports. 10.30—Records. **HILVERSUM** (301.5 m.), V.A.R.A. Orchestra. 10.40—News; Report on the Six Days' Cycle Races.
KALUNDBORG, Radio Ball (contd.). **KÖNIGSBERG**, Serenade.
LEIPZIG, BERLIN, COLOGNE, FRANKFURT, HAMBURG, Variety Concert. **LILLE**, Dramatic (contd.). 10.30—News.
MUNICH, Dance Band.
OSLO, 10.0-10.30—Dance Records.
PARIS (PTT), Symphony Concert (contd.). 10.30—News. 10.45—Dance Music. **POSTE PARISIEN**, U.S.A. Bulletin from New York (contd.). 10.30—Records: Light Music. **PRAGUE**, 10.0-10.30—Dance Music.
RADIO-NORMANDIE, Café Concert. **RADIO-PARIS**, "On ne badine pas avec l'amour"—Opera (Pierné) (contd.). 10.45—Dance Music. **ROME**, News. 10.15—Dance Music.
STRASBOURG, Concert from the Palais des Fêtes. 10.30—News.
TOULOUSE, Paris Programme. 10.15—Orchestra. 10.40—Film Music. 10.55—News. **TURIN**, News.
VIENNA, Announcements, Jazz Band. Refrains.

11 p.m.

BERLIN, Dance Records. **BRUSSELS** (1), Records (Smetana, Strauss, Sibelius). **BRUSSELS** (2), Spanish Rhapsody (Ravel) (Records). 11.15—Brenders Jazz Band. **BUDAPEST** (1), 11.5—News.
DEUTSCHLANDSENDER and **HAMBURG**, Kaiser Dance Band.
HILVERSUM (1,875 m.), 11.0-11.40—Records. **HILVERSUM** (301.5 m.), 11.0-11.40—Report on the Six Days' Cycle Races (contd.).
KALUNDBORG, Radio Ball (contd.).
PARIS (PTT), Dance Music.
RADIO-NORMANDIE, Dance Music. 11.30—From the Cabane Normande. **RADIO-PARIS**, Dance Music. 11.15—Light Music by the Porée Orchestra. **ROME**, 11.0-11.30—Dance Music.
STRASBOURG, News (German). **STUTTGART** and **FRANKFURT**, Serenade (Recorded).
TOULOUSE, Light Music. 11.14—Argentine Orchestra. 11.50—Operetta Songs. 11.55—News.
VIENNA, Magyari Cigány Band from Budapest.

12 midnight

KALUNDBORG, Radio Ball (contd.).
RADIO-NORMANDIE, Dance Music. 12.30—Orchestra. **RADIO-PARIS**, 12.0-12.15—Light Music (contd.).
STUTTGART and **FRANKFURT**, Serenade (Recorded).
TOULOUSE, News. 12.5—Light Music. 12.20-12.30—Military Band.

Nov. 7 SATURDAY

SATURDAY (November 7)

NATIONAL

For Time Signals, see Monday
10.15 a.m. (D)—Service.
10.30 (D)—Weather Forecast.
10.45—Over the Sea—Talk.
11.0—Cinema Organ.
11.30—MacGibbon String Quartet.
12.30 p.m.—Gramophone Records.
1.0—Commodore Orchestra.
2.0—Herring Bulletin.
2.5—Dorothy Hildreth (Pfte.).
2.30—Gramophone Records.
3.15—Dresden State Opera Orchestra—Leader, Jan Dahmen, Conducted by Richard Strauss.
4.45—Gramophone Records.
5.15—Roy Fox and his Band.
6.0—The First News.
6.20—Sports Bulletin.
6.30 (ex D.)—The Radio Gazette, H. L. Fletcher, H. L. Morrow.
6.30 (D)—A Welsh Talk on "Curious Happenings in the Press."
6.45—Brian Lawrance and his Dance Orchestra.
7.30—In Town Tonight.
8.0—"The Palaver is Finished."
8.15—BBC Theatre Orchestra; Gwladys Garside (Contralto).
9.0—The Third News.
9.20—Music-Hall.
10.20—BBC Orchestra (Section C) conducted by Clarence Raybould; Anita Oberlander (Soprano).
11.15—Henry Hall's Hour.
11.30—Late News Summary.
11.40—Henry Hall's Music Makers.

REGIONAL

For Time Signals, see Monday
10.15 a.m.—Service.
10.30—Weather Forecast.
10.45—BBC Northern Orchestra; Elsie Morland (Violin).
11.45—Gramophone Records.
12.15 p.m.—Peggy Male (Pfte.).
12.45—"Songs that made History."
1.0—Gramophone Records.
2.0—Coventry Hippodrome Orchestra.
3.0—Sandy Macpherson at the BBC Theatre Organ.
3.30 (ex. Northern)—Celebrity Trio.
3.30 (Northern)—Records.
3.40 (Northern)—Commentary on Halifax v. Liverpool Stanley Rugby Match.
4.0—Reading.
4.15—"White Coons."
5.15—The Children's Hour.
6.0 (Regional)—The Gershom Parkington Quintet; Linda Seymour (Soprano).
6.0 (Midland)—The Birmingham Theatre Royal Orchestra.
6.0 (Western)—The Cory Workmen's Band; Trevor Anthony (Bass).
6.0 (Northern)—Choir.
6.0 (N. Ireland)—Dance Band.
6.0 (Scottish)—Mackenzie Reid (Accordion).
6.15 (Scottish)—"The Fading Scene."
6.45 (Midland)—"Sport in the Midlands."
6.45 (N. Ireland)—Records.
6.50 (Northern)—Sporting Sketches.
7.0—The Second News.
7.20—Regional Announcements.
7.30 (Regional, Scottish)—The Broadhurst Septet.
7.30 (Midland)—The BBC Midland Orchestra conducted by Leslie Heward.
7.30 (Western)—Welsh Airs; Rhiannon James (Harp), John Edwards (Pfte.).
7.30 (Northern)—Mary Worth (Soprano), Mary Davies (Mezzo-Soprano).
7.30 (N. Ireland)—N. Ireland News.
7.42 (N. Ireland)—BBC Northern Ireland Orchestra (Augmented) conducted by Sir Henry J. Wood; Jo Vincent (Soprano).
8.0 (Regional, Northern)—Sophie Wyss (Soprano), The Isolde Menges Sextet.
8.0 (Western)—Around and About.
8.0 (Scottish)—Jean Houston (Soprano), Alexander Carmichael (Baritone).
8.10 (Western)—"Countryman Afield."
8.30 (Scottish)—The Week in Scotland.
8.30 (Midland)—Saint Simeon Stylites.
8.40 (Western)—The Cardiff Ensemble Chamber Music Concerts.
8.45 (Scottish)—The Scottish Wind Quintet.
9.0 (N. Ireland)—Cinema Organ.
9.20 (ex. Northern, N. Ireland, Scotland)—Debate.
9.20 (Northern)—"Night Watches."
9.25 (Scottish)—Fan Fare.
9.30 (N. Ireland)—"Home Again."
9.45 (N. Ireland)—Sam Carson (Baritone).
9.45 (Scottish)—Betty Lesslie (Soprano).
10.0—News Summary.
10.25—Dance Music.
11.30—Late News Summary.
11.40—Dance Music.

Hours of Transmission in Greenwich Mean Time.

ATHLONE (Ireland)

565 kc/s (531 m.); 60 kW. Relayed by Dublin, 1,348 kc/s (222.6 m.); and Cork, 1,240 kc/s (241.9 m.).

1.30-2.30 p.m.—Time; Weather; Records. 5.30—What's on Next Week? 5.45—Tea-Time Music by the Wood-Wind Ensemble; Song Records. 6.35—Irish News Feature. 6.45—Weather; News; Time. 7.0—A Visitor interviewed. 7.15—Michael O'Callaghan (Songs). 7.25—The new President of America, by M. Barrow. 7.40—Slices of Life. 8.10—Accordion Quartet. 8.30—Station Orchestra.

9.30—Variety. 10.30—Weather; What happened to-day; Light Music. 11.0—National Anthem.

BANSKÁ-BYSTRICA (Czechoslovakia)

392 kc/s (765 m.); 30 kW. Relays Czechoslovak Stations.

BERLIN (Germany)

841 kc/s (356.7 m.); 100 kW.

5.0 a.m.—Weather; Gym.

Orchestra. 12.0 noon—Four "Zigeunerlieder" (Brahms), by the Berne Vocal Quartet. 12.20 p.m.—Light Music by the "Marokko" Orchestra. 12.45-1.0—Weekly Parliamentary Review. 1.0—Music. 1.15-1.30—Labour Market Report. 3.0 (from Basle)—Accordion Ensemble. 3.29—Time.

3.30-5.0—See Monte Ceneri.

5.0-6.0—Programme from Basle. 5.0—Talk by Felix Moeschlin, the Author. 5.30—Music. 5.40—Talk: The British Empire—India. 6.0—Chimes from Zürich Churches. 6.15—Markets. 6.20 (from Basle)—Opera Music. 6.30—News. 6.40 (from Berne)—"Wannsee, November 23rd, 1811"—Sequence for the Hundred and Twenty-Fifth Anniversary of Kleist's Death (Arno Schirokauer). 7.40-9.45—The Zürich Radio Ball; at 9.5-9.15: News. 9.45-10.0 (from Berne)—Weekly Parliamentary Review (Recorded).

BORDEAUX-LAFAYETTE (France)

1,077 kc/s (278.6 m.); 12 kW. Transmits at intervals from 6.50 a.m.

6.30 p.m.—News; Topical. 7.45—Records. 8.0—English Lesson. 8.15—News.

Liebling. O Freund, mein Schirm, mein Schutz. O ihr Herren. Liebster, Deine Worte stehlen. Singet nicht in Trauertönen. 2.40—Winter Relief Report. 2.45—Reading, "Der Bussard" (Ahlers).

3.0—See Munich. 5.0—Talk for the Hundred and Twenty-Fifth Anniversary of Breslau University. 5.20—"Youth travels to a foreign Land"—Sequence (Müller). 5.50—Programme Notes.

6.0—Concert on Records. 6.45—The Day's Sound News. 7.0—News.

7.10—See Königsberg. 9.0—News.

9.30-11.0—Station Dance Band.

BRNO (Czechoslovakia)

922 kc/s (325.4 m.); 32 kW.

Transmits at intervals from 5.15 a.m.

10.55 a.m.—See Prague. 11.0—For Farmers. 11.11-11.25—See Prague.

11.35—Czech Music—Station Orchestra. Conductor: Plichta. 12.30 p.m.—Industrial Review. 12.40—For Farmers. 12.45—Record. 12.50-1.0—See Prague. 2.0—See Bratislava. 3.5-4.35—See Prague. 4.35—Record.

4.40—German Transmission: Hunting and Drinking Songs by Maria Siegmund (Soprano), Ondruschka

11.0-12.0 m't—Records. Die Moldau (Smetana). Also sprach Zarathustra (Strauss). Finlandia (Sibelius).

BRUSSELS (No. 2) (Belgium)

932 kc/s (321.9 m.); 15 kW.
Programme in Flemish.

6.37-9.0 a.m.—Records; News; Gym.
12.0 noon—Records.
12.31 p.m.—Salon Orchestra. Conductor: Féron. Potpourri, Musikalische Seifenblasen (Urbach). Waltz Song (Andy). Cigány Song and Czardas (Strauss). Premier aveu (Gillet).
1.0—News. 1.10—Interview with René Leclercq.
1.15—Light Orchestral.
1.30—Records. 1.45—Report from a Mine. 2.0—Shipping.
2.3—Chamber Music by the Buysse-Rolin Quartet. Concerto (Vivaldi). Quartet (Beethoven).
3.0—Light Music—Antwerp Scala Orchestra.
3.45—Talk: Mons and le Borinage.
4.0—Liszt Festival Concert from Antwerp. Royal Flemish Conservatoire Choirs and Orchestra; the St. Cecilia Choir. Conductor: De Vocht. Symphonic Poem for Orchestra and Women's Voices: Dante. Pfte. Concerto in A. Symphonic Poem, Les Préludes.
5.30—Records: Quartet in A minor (Béla Bartók). 6.0—Talk: Folklore of Mons and le Borinage. 6.15—Records. 6.45—Talk: Literature and le Borinage.
7.0—Lecture-Recital: Walloon Folk Songs. 7.30—News. 8.0—De Blinkende Zonnekloppers Cabaret. 9.0—Report: A Walk round Mons.
9.15—Light Orchestral. Peterman (Bassoon).
10.0—News.
10.10—Chamber Music by the Brussels Quartet. Quartet (Borodin). Quartet in G (Haydn). 11.0—Records: Spanish Rhapsody (Ravel)
11.15-12.0 m't—Brenders Jazz Band.

PRINCIPAL EVENTS

SYMPHONY CONCERTS
3.15 National: Dresden State Opera Orchestra.
4.0 Brussels 2: Liszt Festival.
4.30 Paris (PTT), Strasbourg: Paseloup.
8.0 Prague: S.S.R. National day concert.
8.40 Radio-Normandie: Beethoven.

LIGHT CONCERTS
1.50 Kalundborg: Radio Orchestra.
4.0 Radio-Paris: Pascal Orchestra.
5.0 Deutschlandsender: Folk music.
6.30 Oslo: Popular orchestral.
6.30 Stockholm: Old time dances.
7.10 Deutschlandsender: Paul Lincke.
7.25 Vienna: Radio orchestra, military band.
7.30 Sottens: Contemporary French music.
8.10 Rome: Orchestra, violin.
8.15 Budapest 1: Conductor, Fridl.
8.25 Hilversum (1,875 m.): Operetta music.
8.30 Paris (PTT): National orchestra.
9.15 Oslo: Old dances.
9.30 Leipzig, etc.: Week-end variety concert.
10.0 Hilversum (301.5 m.): Orchestra.
11.15 Radio-Paris: Porée Orchestra.

OPERAS
7.40 Turin: "Consuelo" (Rendano), excerpts.
8.45 Radio-Paris: "On ne badine pas avec l'amour" (Pierné).

OPERETTA
7.10 Hamburg: "Frau Luna" (Paul Lincke).

CHAMBER MUSIC
6.0 Berlin: Romantic music.
7.0 Kalundborg: Quartet (Mendelssohn).
8.0 Regional: Sextets, songs.
10.10 Brussels 2: Quartets (Borodin, Haydn).

RECITALS
5.40 Hilversum (301.5 m.): Organ, song.
6.15 Vienna: Franz Wagner (pfte.).
7.0 Warsaw: Polish folk songs.
8.0 Radio-Paris: Song, harpsichord.
9.0 Poste Parisien: Chansons.
9.5 Turin: Organ.

PLAYS
7.40 Rome: "Gente in treno."
8.15 Brussels 1: "L'école des Femmes."
8.30 Eiffel Tower: Greek classics.

LAST NEWS BULLETINS, see MONDAY

DANCE MUSIC
5.15, Brussels 1; 7.25, Bucharest; 7.40, Beromünster: Radio-Ball, Kalundborg: Radio-Ball for young folk; 8.50, Sottens; 9.0, Monte Ceneri, Stockholm; 9.30, Munich, Warsaw; 9.45, Budapest 1, Oslo; 9.50 Vienna; 10.0, Deutschlandsender; 10.10, Brussels 1; 10.25, Regional; 10.45, Paris (PTT), Radio-Paris; 11.0, Berlin, Radio-Normandie; 11.15, Brussels 2, National.

5.30-7.0—See Breslau; at 6.0: News.

7.0—Gym. 7.20—Music.

7.30—Prasch Band. 8.30—Gym for Children. 8.45—Talk: Health is Beauty.

9.0—See Breslau. 9.30—Weather; Markets. 9.45-10.0—For Young People. 10.55—Weather.

11.0-1.0 p.m.—See Stuttgart; at 12.0 noon: Review. 1.0 p.m.—News. 1.15—Records: Trios. 2.0—Exchange; Markets. 2.30—Songs by Girls. 2.55—Call of Youth.

3.0—See Munich. 5.0—Sports. 5.15—"Elizabeth Tabor"—Play (Borck). Music by Mattausch.

6.0—Romantic Music. Elly von Kovatsy (Pfte.); Annlies Schmidt ('Cello); Frithjof Sentpaul (Baritone); Max Nahrath (Pfte.). Adagio and Allegro for 'Cello and Pfte. (Schumann). Songs (Schumann). Pfte. (Chopin): (a) Mazurkas in B flat and A minor, (b) Waltzes in B minor and A flat. Songs (Wetzel). 'Cello and Pfte.: Silhouetten (Fuchs).

6.45—Evening Echoes. 7.0—News.

7.10—Non-Stop Variety Concert. Small Station Orchestra. Conductor: Willy Steiner. Berlin Trio. Singers. Saxophone, Xylophone and Balalaika.

9.0—News.

9.20—Commentary on the Swimming Contest, Vienna v. Berlin, in Vienna.

9.30—See Leipzig. 11.0-12.0 m't—Dance Records.

BEROMÜNSTER (Switzerland)

556 kc/s (539.6 m.); 100 kW. Relayed by Basle and Berne, 1,375 kc/s (218.2 m.).

5.30 a.m.—Gym. 5.50—Weather.

11.0—Berne Trio. 11.30—News.

11.40—Light Music by the "Marokko"

8.30—To be announced. 10.30—News.

10.45—See Paris (PTT).

BRATISLAVA (Czechoslovakia)

1,004 kc/s (298.8 m.); 13.5 kW.

Transmits at intervals from 5.15 a.m.

2.0 p.m.—Station Orchestra. Conductor: Schimpl. Zidek (Clarinet). Clarinet Concerto in F minor (Weber). Italian Symphony in A (Mendelssohn). 3.0—Weather. 3.5-4.35—See Prague. 4.35—Weekly Review. 4.45—Record. 4.50—Art Notes. 5.0—Hungarian Transmission: Talk; "Rendezvous in Manchester"—Play (Bihary); Comedy (Szij), after Jokai. 5.45-7.0—See Prague. 7.0—Talk. 7.15-9.15—See Prague. 9.15—News in Hungarian. 9.30-10.30—See Prague.

BRESLAU (Germany)

950 kc/s (315.8 m.); 100 kW. Relayed by Gleiwitz, 1,231 kc/s (243.7 m.).

4.0 a.m.—Records. 5.0—Hymn; Gym.

5.30-7.0—Orchestra; Mandoline Trio; Zither; at 6.0: News.

7.30-8.30—See Berlin. 8.30-8.35—Weather. 9.0—"Fahnenschicksale"—Sequence for Schools (Majunke-Lange). 9.30-10.0—For Children.

10.30-10.45—Weather; Water Level.

11.0-1.0 p.m.—See Stuttgart; at 12.0 noon: News. 1.0—News; Exchange; Greetings.

1.15—Variety from Deutschlandsender.

2.0—Markets. 2.5—Talk: Sight.

2.20—Unfamiliar Schumann Songs by Elfriede Reski-Nöldner (Soprano). Der Spielmann. Der schwere Abend. Reich mir die Hand, o Wolke. Mond, meiner Seele

(Baritone). 5.15—News. 5.20—Literary Review. 5.30—Review. 5.45-6.55—See Prague. 6.55—Singing Lesson.

7.15-10.30—See Prague.

BRUSSELS (No. 1) (Belgium)

620 kc/s (483.9 m.); 15 kW.

6.37-9.0 a.m.—Records; News; Gym.

12.0 noon—Records.

12.30 p.m.—Light English Music. Overture, "The Windjammer" (Ansell). Waltz. Bal masqué (Fletcher). Symphonic Rhapsody (Coates). Roses of Picardy (Haydn Wood). March, The Soldier of Fortune (Arthorp).

1.0—News.

1.10—Salon Orchestra. Conductor: Féron.

1.30—Records: Light Music. 2.0—Art Notes.

2.3—Antwerp Scala Orchestra. Conductor: Felleman. Soldiers on Parade (Scher-Eiger). Overture, "Masaniello" (Auber). Waltz, Frühlingsmärchen (Rust). Selection, "The Glory of the Regiment" (May). Japanese Cradle Song (Armandola). The General died at dawn (Carr). Le beau général (Wraskopf).

2.45—Records: Manon (Massenet).

4.55—News. 5.0—Talk arranged by the Belgian Red Cross. 5.15—Candrix Dance Orchestra. 6.0—Labour Ministry Report.

6.15—Symphony Orchestra. Mme. Schreiden-Funcken (Pfte.). Ballet, "Les petits riens" (Mozart). Pfte. Concerto (Grieg). Selection, "A Midsummer Night's Dream" (Mendelssohn).

7.15—Reviews: (a) Art, (b) Hygiene, (c) International Affairs. 7.30—News. 8.0—Lully Records.

8.15—"L'Ecole des Femmes"—Five-Act Comedy (Molière). 10.0—News. 10.10—Brenders Jazz Band.

BUCHAREST (Romania)

823 kc/s (364.5 m.); 12 kW. Relayed by Radio-Romania (Brasov) 160 kc/s (1,875 m.).

4.30-5.30 a.m.—To be announced.

11.0—Time; Water Level; News; Sports. 11.10—Records: Light Music; at 12.10 p.m.: News. 1.0—News. 4.0—Military Band. 5.0—Time; Markets; Topical.

5.15—"From Minuet to Foxtrot"—Dances by the Radio Orchestra. Conductor: Ghiga. Ballet Suite (Grétry-Mottl). Bourrée and Gavotte (Bach-Gevaert). Minuet (Mozart). Mazurka (Dvořák). Polka (Balling). The Lancers (Richardson). Polonaise in A (Chopin). Emperor Waltz (Strauss). Valse-boston (Piquet). Tango (Smidseder). Foxtrot Fantasia, "Die Fledermaus" (Strauss-Kochmann). Blues (David Bee). Pasodoble (Speyer). Carioca (Youmans); at 6.0: Educational.

7.0—Letters. 7.15—Technical Letters. 7.25—Radio Dance Band; at 8.30: News; Sports. 9.45—News (French German, Romanian).

BUDAPEST (No. 1) (Hungary)

546 kc/s (549.5 m.); 120 kW.

Transmits at intervals from 5.45 a.m.

11.5 a.m.—Orchestra. 12.40 p.m.—Szervánszky (Violin). 3.15—Talk. 4.0—Report from a Ceramic Works. 4.50—Daisy Guth (Pfte.). 5.30—Radio Competition Results. 6.0—Station Orchestra. 7.0—Three One-Act Plays. 7.55—News.

8.15—Budapest Concert Orchestra. Conductor: Fridl. Overture, "The Caliph of Bagdad" (Boieldieu). Mazurka (Járay). Suite, L'Arlésienne (Bizet). Waltz, Künstlerleben (Strauss). Suite (Guiraud).

9.45—Dance Records. 11.5—News.

BUDAPEST (No. 2) (Hungary)

359.5 kc/s (834.5 m.); 18 kW.

4.0 p.m.—Talk. 5.0—Records. 6.0—For Farmers. 6.30—Talk. 7.0—Lenke Zsögön (Songs). 7.40—Farkas Cigány Band. 8.35—News.

COLOGNE (Germany)

658 kc/s (455.9 m.); 100 kW.

5.0 a.m.—Hymn; Gym.

5.30-7.0—See Breslau. 7.0—Weather; Water Level. 7.10-7.25—Gym. 8.45—News.

9.0—See Munich. 9.30—For Children.

10.0-10.10—Sports.

11.0 a.m.-1.0 p.m.—See Stuttgart; at 12.0 noon: News and Greetings.

1.0—News. 1.15—Records. 2.15—Songs and Tales by Girls. 2.45—Markets.

3.0—Light Music. Small Station Orchestra. Conductor: Breuer; at 3.45: Book Discussion.

5.0—Next Week's Programmes. 5.5—Lecture-Recital by Franz Kürten:

Popular Instruments, with Illustrations by Meyer and Jansen (Accordions), Boeren (Mouth Organ), and the Radio Schrammel Band.
5.30—"Rheingold 1873" Male Voice Choir. Conductor: Hanemann. Wanderers Nachtlied (Stuermer). Abendlied (Hanemann). Der Abendhimmel (Bruckner). Die Rose stand im Tau (Schumann). Folk Songs: (a) So viel' Stern' am Himmel stehen, (b) Die Königskinder, (c) Es steht eine Lind', (d) Trab' Rösslein, (e) Kuckucks Harem, (f) Der Jäger aus Kurpfalz.
6.0—"Kleist"—Dramatic Programme. 6.45—Snapshots. 7.0—News.
7.10—See Königsberg. 9.0—News.
9.20—Report: Opening of the Hindenburg Skating Rink in Krefeld.
9.35-11.0—Dance Band from Leipzig.

DEUTSCHLANDSENDER (Germany)

191 kc/s (1,571 m.); 60 kW.
5.0 a.m.—Chimes; Records.
5.30-7.0—See Breslau; at 6.0: News.
8.40—Gym.
9.0—See Munich. 9.30—For Children.
10.0—Talk: German-Bulgarian Economic Relations. 10.15-10.30—Weather. 10.40—Talk: Folklore.
11.0 a.m.-12.45 p.m.—Symphony Orchestra from Saarbrücken. Conductor: Jung. Kötscher ('Cello). Overture, "Russlan and Ludmilla" (Glinka). Hungarian Fantasia for 'Cello and Orchestra (Grützmacher). Excerpts, "Sigurd Jorsalfar" (Grieg). Selection, "Hansel and Gretel" (Humperdinck). Overture, "Tsar and Carpenter" (Lortzing). Dynamiden-Walzer (Strauss). Selection, "Boccaccio" (Suppé); at 11.55: Time and at 12.0 noon: Greetings. 12.45—News.
1.0—Variety. 2.0—Weather; Exchange; Programme Notes. 2.10—Call of Youth. 2.15—Songs and Humour for Boys. 2.30—Weekly Industrial Review. 2.45—Talk.
3.0—"Something for Everybody"—Records.
5.0—Folk Songs and Dances. Station Orchestra. Conductor: Dombrowski. Heinrich Groupner (Songs); Mikulicz (Pfte.). 5.40—Weekly Sports Bulletin.
6.0—"From Brasserie to Dance Hall"—A Trip round Berlin. In the interval: The Day's Sound News. 6.45—Topical. 7.0—News.
7.10—Paul Lincke Concert for the Composer's Seventieth Birthday. Station Orchestra. Conductor: Knauer; Station Choir. Conductor: Görner; Else Müller, Else Kochhann, Herbert Ernst Groh, Bruno Fritz and Edgar Kanisch. Bredtschneider (Compère). 9.0—News; Topical.
9.30—Intermezzo and two Scandinavian Melodies (Grimm) by Seiler (Viola) and the Composer (Pfte.).
9.45—Weather.
10.0-11.55—Kaiser Dance Band.

FRANKFURT (Germany)

1,195 kc/s (251 m.); 25 kW. Relayed by Cassel, Coblenz, Freiburg, and Trier. 1,195 kc/s (251 m.).
5.0 a.m.—Hymn; Gym.
5.30-7.0—See Breslau; at 6.0: News.
7.0—Water Level; Weather; Gym.
7.30-7.45—Talk: Swimming.
9.0-9.30—See Munich. 10.0—For Housewives. 10.15—Programme Notes; Markets; Weather. 10.30—Local News. 10.45—Announcements.
11.0 a.m.-1.0 p.m.—See Stuttgart; at 12.0 noon: News. 1.0—News. 1.10—Records. 2.15—Economics. 2.30—Records: Mödling Dances (Beethoven), played by Hitler Youth.
3.0—See Munich.
5.0—"Marches on Opera Themes." Band. Conductor: Steuer. "Faust" March (Gounod-Piefke). March, "The Daughter of the Regiment" (Donizetti). March, "Belisario" (Donizetti). March, "Giselle" (Adam). March-Gallop, "Light Cavalry" (Suppé). March, "La dame blanche" (Boieldieu). Selection, "Le Brasseur de Preston" (Adam). March, "The Merry Wives of Windsor" (Nicolai). March-Gallop, "The Lovely Galatea" (Suppé). "Im Reiche des Indra" (Flotow). March, "The Bohemian Girl" (Balfe). March, "Die Grossfürstin, Sophie Katharina" (Flotow). March, "Martha" (Flotow). March-Gallop, "Das Nachtlager in Granada" (Kreutzer).
5.45—Lincke's Seventieth Birthday—Lecture-Recital by Dittrich (Recorded). 6.30—Weekly Review. 6.55—Call of Youth. 7.0—News.
7.10—See Königsberg. 9.0—Time; News. 9.15—Local News. 9.20—Sports.
9.30—See Leipzig.
11.0 p.m.-1.0 a.m. (Sunday)—See Stuttgart.

HAMBURG (Germany)

904 kc/s (331.9 m.); 100 kW. Relayed by Bremen, Flensburg, Hanover, Magdeburg, and Stettin. 1,330 kc/s (225.6 m.).
5.15 a.m.—Gym.
5.30-7.0—See Breslau; at 6.0: News
7.0-7.15—For Housewives.
9.0—See Breslau. 9.30—Greetings.
9.40—Markets. 9.50 (from Hanover)—Symphony Orchestra. Conductor: von Sosen. 11.0—Shipping.
11.10 a.m.-1.0 p.m.—Popular Concert from Stuttgart; at 12.0 noon: Review. 1.0—News. 1.20—Music. 2.0—For Children. 2.20—Call of Youth. 2.30—Exchange. 2.45—Shipping.
3.0—See Munich.

KALUNDBORG (Denmark)

240 kc/s (1,250 m.); 60 kW. Relays Copenhagen, 1,176 kc/s (255.1 m.)
6.0 a.m.—Gym. 7.30—Service. 9.15—For Schools. 9.59—Weather. 10.10—Fish Markets. 10.45—For Schools.
11.0-1.0 p.m.—Bendix String Ensemble
1.50—Radio Orchestra. Conductor: Tuxen. Rosa Prahl and Svend Prahl (Duets). Overture, "Jean de Paris" (Boieldieu). Eine kleine Nachtmusik (Mozart). Selection, "The Bartered Bride" (Smetana). Emperor Waltz (Strauss). Duets (Dvořák): (a) Vergebliches Hoffen, (b) Gruss aus der Ferne, (b) Der Kranz, (c) Der Schmerz, (d) Das Pfand der Liebe, (d) Die Bescheidene

E.N.A.
Breslau University: its 125th anniversary is celebrated to-day (5 p.m.)

5.0—(from Stettin) Light Music and Dance Music. Stettin Concert Orchestra. Conductor: Quast. Gretel Pust (Soprano).
6.0—Songs and Music by Village Youth. 6.25—Talk: National Defence—The Navigation Survey Ship "Meteor." 6.45—Weather. 6.50—Topical. 7.0—News.
7.10—"Frau Luna"—Operetta (Lincke). Station Choir and Orchestra. Conductor: Gebhardt. 9.0—News.
9.30—See Leipzig.
11.0-11.55—Dance Music from Deutschlandsender.

HILVERSUM (1,875 m.) (Holland)

160 kc/s; 10 kW until 2.40 p.m.; 100 kW from 2.40 p.m.
K.R.O. Programme.
7.40-8.55 a.m.—Records. 9.40—Records. 11.10—Religious Address. 11.40—Police Messages. 11.45—K.R.O. Orchestra. Conductor: van 't Woud. Records in the intervals.
1.0 p.m.—K.R.O. Melodists and Klein (Refrains). 1.40—For Young People.
2.10—K.R.O. Melodists (contd.). 2.40—For Children. 3.40—Jewish Religious Programme.
4.40—K.R.O. Boys and Klein (Refrains). Records in the intervals. 5.25—For Scouts. 5.55—Records. 6.0—Press Review; Records; Police Messages; Talk. 7.15—Topical; News; Prayer; Records.
8.25—K.R.O. Orchestra and Operetta Chorus. Conductor: van 't Woud. Ellen Schwarz (Soprano) and Vos-Mendes (Tenor). 10.10—News; Sports. 10.30-11.40—Records.

HILVERSUM (301.5 m.) (Holland)

995 kc/s; 15 kW until 2.40 p.m.; 60 kW from 2.40 p.m.
V.A.R.A. Programme.
7.40 a.m.—Records.
9.40—V.P.R.O. Religious Programme. 9.55—Records; Recitations. 11.40 a.m.-1.25 p.m.—Records. 1.40—Records. 2.10—Film Review. 2.25—Records. 2.55—Chess.
3.10—Ramblers Dance Band. 3.30—Talk. 4.10—Play. 4.40—V.A.R.A. Orchestra. Conductor: Lohoff. 5.20—Literary Talk. 5.40—Steyn (Organ) and v. Dongen (Songs). 6.10—A Radio Film. 6.40—V.R.O. Talk. 7.40—News. 7.55—Records. 8.30—Talk.
8.40—V.A.R.A. Theatre Orchestra and Others. Conductor: de Groot.
9.10—Ramblers Dance Band. 9.35—Announcements; Report.
10.0—V.A.R.A. Orchestra. Conductor: de Groot. 10.40-11.40—News; Report on the Six Days' Cycle Races.

(f) Die Flucht. Festival Polonaise (Svendsen). Valse triste (Sibelius). Romanian Folk Dances (Bartók). Dance of the Marionettes (Toch). Selection, "The Circus Princess" (Kálmán). March, "Sunny" (Kern).
3.56—Poem. 4.0—Talk: Elk Hunting in the Rockies. 4.25—Weather. 4.40—Exchange. 4.50—Records. 5.15—Weather. 5.35—French Lesson. 6.0—News. 6.30—Discussion: Unemployment.
7.0—String Quartet in A minor (Mendelssohn), by the Aarhus Quartet. 7.30—Weekly Review by Per Knutzon.
7.40-1.0 a.m. (Sunday)—Radio Ball for the Younger Generation.
7.40—Preil's Dance Band. Rungwald (Refrains); Margrete Krabbe Sadolin (Songs to the Guitar); at 8.50: Talk, and at 9.0: News. 10.15—Walther Dance Band from the Valencia. 11.0—Chimes; Ewans Dance Band from the Nimb. 12.0 m't-1.0 a.m. (Sunday)—Stangerup Dance Band from the "Hollaenderby."

KÖNIGSBERG (No. 1) (Heilsberg) (Germany)

1,031 kc/s (291 m.); 100 kW. Relayed by Danzig, 1,303 kc/s (230.2 m.).
5.0 a.m.—Weather; Records. 5.15—Gym.
5.30-7.0—See Breslau. 7.0—Prayers. 7.15—Gym.
7.40-8.30—Band from Berlin.
9.0-9.30—See Munich. 9.45—Weather. 10.30—Legal Talk. 10.50—Markets. 10.55—Weather.
11.0 a.m.-1.0 p.m.—See Stuttgart; at 12.0 noon: News. 1.0—News. 1.10—Talk: A Model Mother-in-law. 1.20—Peter Arco, with Records. 2.0—Technical Talk.
2.15—Talès and Songs from Scandinavia. 2.45—Topical.
3.0—See Munich.
5.0—Lincke Records for the Composer's Seventieth Birthday. 6.0—Local News. 6.10—Talk: The War Wounded and Ex-Servicemen under the National Socialist Régime. 6.30—"Where are you Comrade?" 7.0—News.
7.10—"Marjellche in the Land of Lakes and Elks"—Play with Music (Reisner-Börschel). Station Orchestra, Börschel Dance Band, Trumpeter Corps, Accordion Band, Station Choirs and others. Conductor: Börschel. 9.0—News. 9.20—Report: Judging the Ten Best Athletes of East Prussia.
9.35-11.0—Serenade. Small Station Orchestra. Conductor: Wilcken.

LAHTI (Finland)

166 kc/s (1,807 m.); 150 kW. Relayed by Helsinki, 895 kc/s (335.2 m.).
Transmits at intervals from 6.5 a.m.
3.0 p.m.—Classical Music. 4.0—Talk. 4.20—Accordion. 4.40—Talk. 5.0—News (Finnish, Swedish). 5.15—Talk. 5.40—Magyar (Violin). 6.10—Light Music. 6.50—Paasonen Poems. 7.10—Dance Music. 7.45—News (Finnish, Swedish). 8.10-10.0—Dance Music.

LEIPZIG (Germany)

785 kc/s (382.2 m.); 120 kW. Relayed by Dresden, 1,285 kc/s (233.5 m.).
5.0 a.m.—Motto; Gym.
5.30-7.0—See Breslau; at 5.50: Notes for Farmers; News.
7.0-8.30—See Berlin. 8.30—Anniversaries. 8.35—For Women. 8.50—Exchange. 8.55—Water Level.
9.0—See Munich. 9.30-9.45—Weather; Programme Notes. 10.30—Weather. 10.45—For Farmers.
11.0 a.m.-1.0 p.m.—See Stuttgart; at 12.0 noon: News. 1.0—News; Exchange.
1.15—Variety from Deutschlandsender. 2.0—Book Review: German History. 2.20—For Children. 2.50—Weather; Markets.
3.0—See Munich. 5.0—A Modern Dictionary.
5.15—Folk Songs. The "Maximilian Thamm" Folk Song Choir and the "Sängerbund" Male Voice Choir of Franzensbad. Glückliche Liebe (Burgstaller). Heimatwald (Martin). An mein Egerland (Pfeiffer). Songs to the Lute in Egerland Dialect (Lohberger). Egerland Dialect Choruses: (a) Zwoa Räisala (Sabathil), (b) A gouta Stun (Anton), (c) Tscheimst ümandüm (Weiss). Egerland Dialect Songs (Lohberger). Egerland Dialect Choruses: (a) Tonnawold, du bist sua schäi, (b) Wöi ma ma Herzell lächt, (c) Ba uns dahaim in Eghaland.
6.0—"An Evening with Chopin"—Sketch (Hänsler) with Blumer (Pfte.).
7.0—News.
7.10—See Königsberg. 9.0—News.
9.30-11.0—Variety Concert. Leipzig Symphony Orchestra. Conductor: Kretzschmar. Tresi Rudolph (Soprano). Luitpold Ganther (Tenor).

LILLE (Radio PTT Nord) (France)

1,213 kc/s (247.3 m.); 60 kW.
Transmits at intervals from 6.50 a.m.
7.0 p.m.—Music-Hall. 7.30—Records: Light Music. 8.0—Sports. 8.15—For Housewives. 8.30—Dramatic Programme. 10.30—News.

LYONS (PTT) (France)

648 kc/s (463 m.); 100 kW.
Transmits at intervals from 6.50 a.m.
6.30 p.m.—News. 7.30—Surprise Programme. 8.0—Talks.
8.30—Plays: (a) "Le cheval de cirque" (Gignoux), (b) "Seule" (Duvernois), (c) "La Lettre charge" (Courteline). 9.30-12.0 m't—Dance Records; at 10.30: News.

MONTE CENERI (Switzerland)

1,167 kc/s (257.1 m.); 15 kW.
Transmits at intervals from 11.0 a.m.
11.0 a.m.-12.45 p.m.—See Beromünster; at 11.30: News. 12.45-1.0—Fashions. 3.29—Time. 3.30—Dance Music. 4.0—Talk: Figures in Ticino History—Captain Camossi.
4.10-5.0—Radio Orchestra. Conductor: Casella. Mazzacurati ('Cello). Overture, "Nina" (Paisiello). 'Cello Concerto in B flat (Boccherini). Three German Dances (Mozart). 'Cello: Romance (Beethoven).
5.59—Announcements; Records. 6.15—Weekly Review. 6.30—Records. 6.45—News. 7.0—To be announced. 8.0—Opera Programme. 8.45—Talk: Statesmen of the Ticino—G. B. Quadri de Vigotti.
9.0-10.0—Dance Music. Part I: Folk Dances by the Rusticanella Band. Part II: Jazz by the Bob Engel Band.

MUNICH (Germany)

740 kc/s (405.4 m.); 100 kW. Relayed by Nürnberg, 1,267 kc/s (236.8 m.).
5.0 a.m.—Weather; Gym. 5.30—Italian Lesson.
6.0—Programme from Breslau. 7.0—Motto; Gym. 7.20-7.40—For Women.
9.0-9.30—"The Lonely March"—Play about November 9th, 1923 (Weinberger). 10.0—For Country People. Markets; Schrammel Quartet; Dialect Sketch; News.
11.0 a.m.-1.0 p.m.—See Stuttgart; at 12.0 noon: News. 1.0—News; Exchange. 1.10—Weekly Sports Bulletin. 1.20—"Dialect or no

SATURDAY (November 7)

Dialect?" Discussion by Girls from Various Districts. 1.45—Records: Light Music. 2.20—Talk: Franconia's Reich Motor Roads. 2.50—Weather; Markets.
3.0—For Young and Old—Concert of Popular Music. Station Orchestra, Choir, Dance Band and Schrammel Band. Conductor: List; Maria Reining (Soprano); Walter Carnuth (Tenor); Ludwig Köhler-Evanell (Mandoline), and others.
5.0—Light Music by the Augsburg Dance Band. Conductor: Stimmler. Marching Song, Der kleine Husar (Stolz). Tanzendes Leben (Kletzki). Jedes Mägdelein träumt vom glücklich sein (Müller-Marc). Tango; Janja (Kötscher). Waltz, Strahlender Süden (Wetzel). Sehnsüchtige Melodie (Wismar). Funkraketen (Rixner). Selection, "Ball der Nationen" (Raymond).
5.50—Hitler Youth greets Old Members of the National Socialist Movement. 6.20—Talk: Franz Marc's Picture, "The Red Roe." 6.30—Records of Gigli.
6.40—Novelette in D (Schumann), by Richard Staab (Pfte.). 6.50—Topical. 7.0—News.
7.10—Lincke's Seventieth Birthday—Lecture-Recital by Dittrich (Recorded).
7.50—Munich Humour and Variety (arr. Schneider-Franke). 9.0—Time; News. 9.20—To be announced.
9.30-11.0 (from Nürnberg)—Dance Band. Conductor: Schwarz.

OSLO (Norway)

260 kc/s (1,153.8 m.); 60 kW. Relayed by Fredrikstad, 776 kc/s (386.6 m.); Hamar, 519 kc/s (578 m.); Notodden, 1,357 kc/s (221.1 m.); Porsgrund, 850 kc/s (352.9 m.); Rjukan, 1,348 (222.6 m.); and Trøndelag, 629 kc/s (476.9 m.).
Transmits at intervals from 10.40 a.m.
4.0 p.m.—Records. 5.0—For Children. 5.30—Economics. 5.50—News.
6.30—Time; Station Orchestra. Conductor: Kramm. Norwegian Rhapsody (Reidarson). Jota Navarra (Sarasate). Elegy (Massenet). Four Norwegian Dances (Hjellemo). Nutcracker Suite (Tchaikovsky); at 7.5: Talk.
7.45—Soirée arranged by the Authors' Association. 8.40—News. 9.0—Topical. 9.15—Old Dance Music.
9.45-10.30—Dance Records.

PARIS (Eiffel Tower) (France)

1,456 kc/s (206 m.); 5 kW.
Transmits at intervals from 8.0 a.m.
6.45 p.m.—Music Talk. 7.0—News; Racing. 7.20—Foreign Affairs. 7.45—Press Review. 7.55—Home Affairs.
8.30—Greek Classics: (a) "The Seven against Thebes"—Tragedy (Aeschylus); (b) "Batrachomyomachia" (Homer), adapted by Laboure.

PARIS (Poste Parisien) (France)

959 kc/s (312.8 m.); 60 kW.
7.10 a.m.—Fanfare; Records; at 7.30: News; at 8.10: Dietetics and at 8.30: News. 12.0 noon—Exchange. 12.5 p.m.—Records, 12.35—Records: Light Music. 12.55—Song Records. 1.15—Folies-Bergère. 1.30—Exchange.
1.33—Massenet Records. Excerpts, "Werther," "Thais."
1.48—"And Life goes on"—Topical Sequence. 2.0-2.30—For Girls.
3.0—From the A.B.C. Theatre; at 3.45: Exchange. 6.0—Call. 6.2—Roman Catholic Review. 6.22—Records. Nutcracker Suite (Tchaikovsky). 6.30—Exchange. 6.35—Dialogue. 6.42—Song Records.
6.47—Foreign Press Review. 7.2—Record. 7.6—News. 7.30—Records: Sketches. 7.45—Film Music. 8.0—Paul Reboux. 8.15—Light Music.
8.30—Chansonnettes.
9.0—"La Chanson du tiroir" (Nohain-Delettre). 9.45—U.S.A. Bulletin from New York. 10.30-11.0—Records: Light Music.

PARIS (PTT) (France)

695 kc/s (431.7 m.); 120 kW.
Transmits at intervals from 6.50 a.m.
2.30 p.m.—Concert for Hospitals. Pfte.: (a) Cordova (Albéniz), (b) Albumblad (Grieg). Songs. "Ash on the Carpet"—Sketch (Guliani).
3.30—Literary Talk. 3.50—Elisabeth Kotlaroff (Songs).
4.0—Marius Casadesus (Violin); Suzette Delfaud (Pfte.). Concerto in A minor (Bach). Catalan Folk Tunes (arr. Casadesus). Pour invoquer Pan (Debussy). L'ingénue (Casadesus). Liebesfreud (Kreisler).
4.30—Pasdeloup Concert.
6.30—News; Review. 7.30—Weather.

SATURDAY (November 7)

7.38—Talk arranged by the Board of Trade.
7.45—Simone Jacsont (Pfte.). Musette en rondeau (Rameau). Gavotte and Musette (Bach). Gavotte (Handel). Minuet (Paderewski).
8.0—Film Review. 8.10—Economics.
8.20—Reading (Villers de l'Isle-Adam).
8.30—Popular Concert. National Orchestra. Conductor: Morel. André Asselin (Violin); Françoise Holmay (Songs). Overture, "Zaïs" (Rameau). Violin Concerto in E (Bach). Ballet, "Le Mage" (Massenet). Eglogue (Rabaud). Iseyl (Pierné). Two Sketches (Halfter). Three Songs (Roland Manuel): (a) En Arles, (b) Géronte, (c) Le temps d'Adonis. Pastorale from "La Farce du Cuvier" (Dupont). Agnès, dame galante (Février). 10.30—News.
10.45—Dance Music by the Robert Orchestra.

PARIS (Radio-Paris) (France)

182 kc/s (1,648 m.); 80 kW.
6.45 a.m.—Gym. 7.0—Records.
7.15—Press Review. 8.0—Records.
11.0—Records: French Operetta Music.
12.0 noon—For Farmers. 12.15 p.m.—Records: Oriental Music.
12.45—News; Review.
1.0—Records: Venice in Music. Selection, "Le Carnaval de Venise" (Thomas). Overture, "A Night in Venice" (Joh. Strauss). Venice, City of Love (Kaper-Jurmann). Le marchand de Venise (Rinaldi).
1.15—Danjou (Songs).
1.30—Records: Light Music. 2.0—Talk: Birds. 2.15—Reading by Marcel Berger. 2.30—Records: Music-Hall. 3.0—For Children.
4.0—Light Music by the Pascal Orchestra.
5.0—Literary Review. 5.15—Talk: The Influence of Modern Art on Life in Indochina.
5.30—Records: Italian Bel Canto. De Luca: Aria, "La Gioconda" (Ponchielli). Tito Schipa: Una furtiva lagrima, "L'Elisir d'amore" (Donizetti). Toti dal Monte: Aria, "La sonnambula" (Bellini). Caruso: Your little hand is frozen, "La Bohème" (Puccini). Laura Volpi: Aria, "Andrea Chenier" (Giordano). Lily Pons: Cavatina, "The Barber of Seville" (Rossini).
6.0—Economics. Review; Talk: The Devaluation of English Currency.
6.30—Records: Novelties. 7.0—Waltz Records. 7.30—Talk: Ninon de Lenclos. 7.45—Racing.
8.0—Simone Sorelli (Songs); Marguérite Delcourt (Harpsichord). Part I. Songs. Tes yeux tristes (Lenormand). Two Songs (Franz). Il Primo amor (Widor). Ragna (Grieg). Part II. Harpsichord. Pavane (Byrd). Chaconne (Couperin). Sarabande (de Chambonnières). Sarabande (Bach). Tricotets (Rameau). Sicilienne (Scarlatti).
8.30—News. 8.45—Concert Version. "On ne badine pas avec l'amour"—Three-Act Opéra-Comique (Pierné). Conductor: Bigot. 10.45—Dance Music by the Porée Orchestra.
11.15 p.m.-12.15 a.m. (Sunday)—Light Music by the Porée Orchestra. Overture, "La fille de Madame Angot" (Lecocq). Télévision d'Orient (Ramby). Selection, "H.R.H." (Caryll). Songs. Xylophone Solos. La Nursery (Inghelbrecht). Prelude (Haydn-Wood). En terre celtique (Duhamel).

PRAGUE (Czechoslovakia)

638 kc/s (470.2 m.); 120 kW.
Transmits at intervals from 5.15 a.m.
10.0 a.m.—Record. 10.5—Band from Moravská-Ostrava. 10.55—For Farmers. 11.11—Records. 11.25—News. 11.35-12.30 p.m.—See Brno. 12.30—Talk: Export Trade. 12.40—Records. 12.50—Exchange. 12.55-1.0—Exchange and Weather in German. 1.40—For Schools.
2.0—See Bratislava. 3.0—Weather. 3.5—Orchestra from Kosice. 3.45—For Children. 4.35—For Farmers. 4.45—For Workers. 4,55—German Transmission; Sports; Political Talk; Folk Songs by a Peasant Quartet. 5.45—News in German. 6.0—News. 6.15—Light Music and Dance Music from Moravská-Ostrava. 7.0—Discussions.
7.15—Military Band. Conductor: Pesta. March (Priborský). Song (Friml). Slovak Dance (Vackár). Sousedská (Pesta). Polka (Smetana). Intermezzo (Bayer). Song (Horný). Siamesische Wachtparade (Lincke). Intermezzo, Night on the Sava (Zaic). Sokol March (Pesta).
8.0—Programme for the Soviet Russian State Holiday. Orchestra, Conductor: Jeremiás. Recitations. 9.0—Time; News. 9.15—Records. 9.30-10.30—Dance Music.

RADIO CÔTE d'AZUR (Juan-les-Pins) (France)

1,276 kc/s (235.1 m.); 27 kW.
Transmits at intervals from 12.15 p.m.
6.15 p.m.—Dance Music. 6.30—Variety.
7.0—Orchestra. Overture (Tchaikovsky). Symphony in C minor (Brahms). 7.25—Amusements; For Children. 7.30—Weekly Review. 7.45—Light Music. 8.0—News. 8.20—Light Music. 9.10—Variety. 10.0—News. 10.15—Dance Music.

RADIO-NORMANDIE (France)

1,113 kc/s (269.5 m.); 15 kW.
7.0 a.m.—Military Music; at 7.10: News. 8.0—Songs. 8.15—Records. 8.30—Light Music. 8.45—Records. 9.0—Popular Music. 9.15—Songs. 9.30—Records. 9.45—Waltzes. 10.0—Records. 10.15—Light Music. 10.45—Dance Music. 11.0—Light Music. 12.0 noon—Records. 12.20 p.m. — Hawaiian Guitar. 12.40—News. 1.0—Light Music. 1.30—Records. 2.15—Light Music. 2.30—Dance Music.
3.0—Light Music. 3.30—Records. 3.45—Concert. 4.45—For Children. 5.0—Records. 5.15—Light Music. 5.30—Records. 5.45—Light Music. 6.0—Children's Corner. 6.40—Talk; Racing. 7.0—Concert. 7.40—News. 8.0—Records.
8.20—Concert. Excerpts, "La Fille de Madame Angot" (Lecocq), "Faust" (Gounod), Les Braconniers (Offenbach).
8.40—Classical Music. Symphony in F—The Pastoral (Beethoven). First Sonata (Saint-Saëns).
10.0—Café Concert. 11.0—Dance Music. 11.30—From the Cabane Normande. 12.0 m't—Dance Music. 12.30-1.0 a.m. (Sunday)—Orchestra.

RADIO-ROMANIA (Brasov) (Romania)

160 kc/s (1,875 m.); 150 kW.
See Bucharest.

ROME (Italy)

713 kc/s (420.8 m.); 50 kW. Relayed by Naples, 1,104 kc/s (271.7 m.); Bari (No. 1), 1,059 kc/s (283.3 m.); Bari (No. 2), Milan (No. 2) and Turin (No. 2), 1,357 kc/s (221.1 m.).
Transmits at intervals from 6.45 a.m.
12.10 p.m.—Mancini Orchestra. 12.50—News. 1.0—Records; Exchange. 1.15-2.0—News; Talks; Organ.
3.0—Educational Talk by Ferruccio Ferrazzi: Painting. 3.40—For Children. 4.0—News.
4.15—See Turin. 4.55—Talk. 5.10-5.40—Rural Programme. 5.50—Dopolavoro Notes. 6.0—Records; Talk in Esperanto. 6.20—News in Foreign Languages. 7.5—Time; News; Lotteries. 7.30—Talk. 7.40—"Gente in treno"—One-Act Play (Giannini).
8.10—Orchestral Concert. Conductor; Gavazzeni. Pierangeli (Violin). In the interval: Talk. 10.0—News. 10.15-11.30—Dance Music.

SOFIA (Bulgaria)

850 kc/s (352.9 m.); 1 kW.
Transmits at intervals from 10.0 a.m.
4.30 p.m.—Police Band. 5.50—Songs. 6.10—Sofia Wind Instrument Quintet. 6.45—Talk. 7.0—Songs. 7.35—Three Symphonic Pieces (Glazunov). 7.45—News. 8.0-9.30—Light Music and Dance Music; at 8.45: Notes.

SOTTENS (Switzerland)

677 kc/s (443.1 m.); 100 kW. Relayed by Geneva, 401 kc/s (748 m.).
11.0 a.m.-12.45 p.m.—See Beromünster; at 11.30: News. 12.45 p.m.—News. 12.50-1.10 (from Geneva)—An Interview. 3.29—Time.
3.30-5.0—See Monte Ceneri. 5.0—Lausanne Cathedral Chimes. 5.10—For Children. 6.0—A Radio Film. 6.50—News. 7.0—Weekly Sound News.
7.30—French Contemporary Music. Radio Suisse romande Orchestra. Conductor: Haug. Maurice Perrin (Pfte.). Suburbis (Monpou). Pfte. Concertino (Honegger). Paysage pour une Jeanne d'Arc à Domremy (Ribier). Pfte. and Orchestra: Aubade (Poulenc). Valses nobles et sentimentales (Ravel).
8.50-10.0—Alexander Dance Band.

STOCKHOLM (Sweden)

704 kc/s (426.1 m.); 55 kW. Relayed by Motala, 216 kc/s (1,389 m.); Göteborg, 941 kc/s (318.8 m.); Hörby, 1,131 kc/s (265.3 m.); and Boden, 392 kc/s (765 m.).
Transmits at intervals from 6.20 a.m.
1.0 p.m.—Military Band. 2.0—Reading. 2.30—Light Music by the Österberg Orchestra. 3.5—Play for Children.
3.35—Norwegian Music by Mary Barratt-Due (Pfte.). Pieces (Sinding): (a) Prelude in A flat, (b) Piece in Folk Style), (c) March. Six Lom Folk Songs (Olsen). Suite (Johansen). Carnival Piece (Grieg).
4.5—The Ceremony of the Chairing of a Professor at Uppsala University. 5.10—Records. 6.0—"The Björk Family"—Sketch (Alice Svensk). 6.30—Old Dance Music. 7.15—Report. 8.0—Cabaret. 8.45—News. 9.0-10.0—Station Dance Band.

Paul Lincke. Deutschlandsender gives a programme in honour of his 70th birthday (7.10 p.m.)

STRASBOURG (France)

859 kc/s (349.2 m.); 100 kW.
Transmits at intervals from 6.45 a.m.
11.45 a.m.—Records. 12.50 p.m. (approx.)—News. 1.15—Light Music by the Station Orchestra. Conductor: Bour. 2.0—Records. 2.15—Exchange 2.30-4.0—Light Music.
4.30—See Paris (PTT). 6.30—News; Review. 7.30—News. 7.45—News (German). 8.0—Sports. 8.20—Press Review (German).
8.30—One-Act Plays: (a) "Le Bal"—in Verse (Regnard), (b) "Les deux Clochards" (Maxime-Léry). 10.0—Concert from the Palais des Fêtes. 10.30—News. 11.0—News (German).

STUTTGART (Germany)

574 kc/s (522.6 m.); 100 kW.
5.0 a.m.—Hymn; Weather; Gym.
5.30-7.0—See Breslau. 7.0—Water Level; Weather; Gym.
7.30—See Berlin. 8.30-8.40—Programme Notes.
9.0-9.30—See Munich. 10.30—For Farmers.
11.0 a.m.-1.0 p.m.—Popular Concert from Heidelberg. Heidelberg Municipal Orchestra. Conductor: Bohne; Band. Conductor: Schetters; Ly Brühl (Soprano); Paul Belak (Tenor); Adolf Fischer (Violin); Heidelberg Municipal Theatre Vocal Quartet. March, Hoch Heidecksburg (Herzer). Overture, Im Herbst (Köhler). Violin: Souvenir de Sarasate (Friedemann). March, Einzug schneidiger Truppen (Blankenburg). Duet, "Gasparone" (Millöcker). Glockenblumen (Löhr). March, The Gladiators' Farewell (Blankenburg). Waltz, Lustige Brüder (Vollstedt). Two Hungarian Dances (Brahms). Florentine March (Fucik). March, Hand in Hand (Blon). Overture, "La macarena" (Behr). Selection, "Liebesqual um Hannibal" (Metz-Hübsch). March, Folies bergère (Lincke). Waltz, Grossstadtkinder (Ertl). March, Deutschlands Ruhm (Schröder); at 12.0 noon: News.
1.0 p.m.—See Deutschlandsender.
2.0—"From the Alps to the Baltic"—Songs and Music by Hitler Youth from North and South (Recorded). 2.30—Luis Trenker talks about himself (Recorded). 2.55—Call of Youth.
3.0—See Munich. 5.0—Weekly Sound News.
5.30—Folk Music by the Berne Yodelling Club. 6.0—Records: Popular Hits. 7.0—News.
7.10—See Königsberg. 9.0—Time; News. 9.30—Records.
10.0—See Deutschlandsender.
11.0 p.m.-1.0 a.m. (Sunday)—Serenade (Recorded). March, Regimentsgruss (Steinbeck). Overture, "Poet and Peasant" (Suppé). Kaiserwalzer (Strauss). Army March on Themes from "La dame blanche" (Boïeldieu). Hungarian Dance (Brahms). Hildebrande-Ballade (Lichner). Overture, "The Daughter of the Regiment" (Donizetti). Army March (Gerold). Anitra's Dance (Grieg). Waltz, Dorfschwalben aus Oesterreich (Strauss). March, Deutsche Wehr (Hohberg). Song, Wenn man beim Wein sitzt (Abt). Overture, "Light Cavalry" (Suppé). Czardas (Hohberg). Perpetuum mobile (Strauss). Weddigen-Marsch (Büttner). Waltz, Die Werber (Lanner). March, Aus eigener Kraft (Rupprecht).

TOULOUSE (Radio-Toulouse) (France)

913 kc/s (328.6 m.); 60 kW.
Transmits at intervals from 8.0 a.m.
8.0 p.m.—News. 8.15—Band.
8.25—Excerpts, "I Pagliacci" (Leoncavallo). 8.40—Dance Music. 8.55—News. 9.10—"Croisières"—Fantasy. 9.45—Paris Programme. 10.15—Orchestra. 10.40—Film Music.
10.55—News. 11.0—Light Music. 11.15—Argentine Orchestra.
11.40—Operetta Songs, "Brummel" (Hahn). "Simone est comme ça" (Moretti), "Faites ça pour moi" (Gabaroche), "Malvina" (Hahn).
11.55—News. 12.5 a.m. (Sunday). Light Music. 12.20—Band. 12.30—Announcements.

TURIN (No. 1) (Italy)

1,140 kc/s (263.2 m.); 7 kW. Relayed by Milan (No. 1), 814 kc/s (368.6 m.); Genoa, 986 kc/s (304.3 m.); Trieste, 1,140 kc/s (263.2 m.); Florence, 610 kc/s (491.8 m.); Bolzano, 536 kc/s (559.7 m.); and Rome (No. 3), 1,258 kc/s (238.5 m.).
6.45 a.m.—Gym. 7.0-7.20—News.
10.30—Malatesta Chamber Orchestra.
11.15—Records. 11.45—News. 12.0 noon—Sports.
12.10-1.15 p.m.—See Rome.
3.0—See Rome. 3.40—For Children.
4.0—News.
4.15—Dance Music. 4.55—Talk. 5.10-5.40—Rural Programme. 5.50—Dopolavoro Notes. 6.0—News in Foreign Languages. 7.5—Time; News; Lotteries. 7.30—Talk.
7.40—Excerpts, "Consuelo"—Opera (Rendano). Conductor: Morelli. Chorus Master: Costantini. Cast: Maria Persula, Mazziotti, Conti, Meletti, Gualda Caputo and Agnese Dubbini. 8.55—Talk.
9.5—Viganelli (Organ). Pastorale (Pasquini). Choral (Bach). Fugue in E Flat (Tortora). Legend (Manari). Berceuse (Refice). Choral in A minor (Franck); at 9.35: Announcements.
10.0 (approx.)—News.

VIENNA (Austria)

592 kc/s (506.8 m.); 100 kW. Relayed by Graz and Linz, 886 kc/s (338.6 m.); Innsbruck, 519 kc/s 578 m.); Klagenfurt and Vorarlberg, 1,294 kc/s (231.8 m.); and Salzburg, 1,348 kc/s (222.6 m.).
6.0 a.m.—Gym. 6.20—News. 6.25-7.0—Records. 8.10—News. 9.50—Records: Peasant Music. 10.20—Water Level; Weather. 10.30—Fashion Talk. 10.55—Weather.
11.0—Station Orchestra. Conductor: Holzer. Wanausek (Flute). Overture, "Der Freischütz" (Weber). Flute Concertino (Andress). Waltz, Widmungsblätter (Strauss). Ballet, "Die Schöne von Fogaroach" (Grünfeld). Volksliedchen und Märchen (Komzak). Overture, "Pique Dame" (Suppé). Potpourri, Three Strausses (Lindemann). Old Viennese Pictures in Biedermeier Style (Bass). Waltz, Natursänger (Ziehrer). Micky-Mouse's Dream (Kliment). Potpourri, Bei den Wiener Schrammeln (Reetenwald); at 12.0 noon: News.
1.0 p.m.—Records: Duets with Gigli (Tenor). Pinza and Gigli: Duets, "Lucia di Lammermoor" (Donizetti). De Luca and Gigli: Duets, "La Gioconda" (Ponchielli), "The Force of Destiny" (Verdi), "La Bohème" (Puccini).
1.30—Announcements. 2.0—Time; Markets. 2.15—Talk in Italian: Michelangelo.
2.35—Vienna Schubert Society and Lyric Quartet; Isolde Riehl (Contralto) and Lambert Haselbrunner (Tenor). Conductor: Keldorfer. Sixteenth Century Folk Song. Verlorenes Lied (Kirchl). Songs (Weber): (a) Gebet vor der Schlacht, (b) Lützows wilde Jagd, (c) Schlummerlied, (d) Mein Schätzle ist hübsch. Songs (Bruckner): (a) Tafellied, (b) Mitternacht, (c) Um Mitternacht, (d) Träumen und Wachen.
3.20—News; Exchange. 3.25—Talk: Mountains. 3.40—Talk; Flying over Foreign Lands. 4.5—Records.
5.0—Folk Songs and Viennese Classics, from the Konzerthaussaal. 5.30—Foreign Affairs. 6.0—Time; News.
6.15—Franz Wagner (Pfte.). Pieces (Schumann): (a) Des Abends, (b) Grillen, (c) Warum?, (d) Träumeswirren. Pieces (Schubert): (a) Impromptu in G, (b) Valses nobles. Pieces (Chopin): (a) Etude in A flat, (b) Mazurka in D, (c) Polonaise in A flat.
7.25—"Civil and Military"—Station Orchestra. Conductor: Holzer; a Military Band. Conductor: Gaigg. March, Das ist der Zauber Monturl (Ziehrer). Overture, "A Summer Night's Dream" (Suppé). Siamese Watch Parade (Lincke). Waltz, Gral zum Gruss! (Humel). Potpourri, Ernst und Scherz fürs Wiener Herz (Komzak). Italian Melody (Moszkowski). Tango Song, Ein Strausschen Rosmarin (Steinbrecher-Gaigg). Vision (Drdla). Overture, "Norma" (Bellini). Waltz, Nachtschwärmer (Ziehrer). March, Triglav (Fucik). Hoch das dritte Regiment! (Gebauer). Potpourri, Diamonds and Pearls (Dostal). Waltz, Weana Mad'ln (Zierher). Waltz, Badner Mad'ln (Komzak). Marching Song, Lass mich schau'n! (Eisenstein-Gaigg).
8.50—Film Review. 9.10—News.
9.20—Commentary on the Swimming Contest Berlin v. Vienna from the Dianabad.
9.50—Jecha Jazz Band; Schier (Refrains); at 10.0: Announcements.
11.0-12.0 m't—Magyari Cigány Band from Budapest.

WARSAW (Poland)

224 kc/s (1,339 m.); 120 kW. Relayed by Cracow, 1,022 kc/s (293.5 m.); Katowice, 758 kc/s (395.8 m.); Lódz, 1,339 kc/s (224 m.); Lwów, 795 kc/s (377.4 m.); Poznań, 868 kc/s (345.6 m.); Torun, 986 kc/s (304.3 m.); and Wilno, 536 kc/s (559.7 m.).
5.30 a.m.—Hymn; Gym. 5.50—Records. 6.15—News; Announcements. 6.30—Records. 7.0-7.10—For Schools. 10.30—Songs. 10.57—Fanfare. 11.3—Station Orchestra. Conductor: Górzyński. 11.40—Farmers' Letter-box. 11.30 a.m.-12.14 p.m.—News.
1.30 (from Lwów)—Opera for Children (Cui). 2.0—Economics. 2.15—Records. 3.0—Programme Notes. 3.10—Art Notes.
3.15—Inauguration of the New Radio Station at Wilno. Addresses. Songs by Contemporary Wilno Composers, sung by the "Pro Arte" Double Vocal Quartet. (Rudziński, Czosnowski, Jakajtis, Szeligowski, Weslawski). 4.0 (from Wilno)—Service from the Ostro-Brama. 4.50—Books. 5.0—Topical. 5.10—Sports. 5.20—Announcements. 5.45—Programme Notes. 5.50—Topical. 6.0 (from Wilno)—For Poles Abroad: Kosciuszko Programme.
6.30 (from Lwów)—Seredyński Orchestra. Intermezzo, "Das Kätzchen" (Siede). Am Lagerfeuer (Siede). Intermezzo (Albert). Japanese Lullaby (Armandola). Serenade (Heykens). Descriptive Piece (Kéler-Béla).
7.0 (from Wilno)—Polish Folk Songs for Choir. 7.30—Reading. 7.45—News. 7.55—Topical.
8.0—Finnish Music by Minna Talvik-Palmgren (Songs) and Selim Palmgren (Pfte.). Prelude in B flat (Palmgren). Sonatina in F (Palmgren). Le diamant sur la neige de Mars (Sibelius). L'Arbre chauve (Sibelius). Songs (Kilpinen). Pieces (Palmgren): (a) Barcarolle in D flat, (b) Au bord du lac, (c) Scherzino in G flat, (d) Caprice in A minor. Songs (Palmgren).
8.35—Song Records. 9.0 (from Wilno)—To be announced.
9.30—Station Dance Band.

STATIONS IN ORDER OF FREQUENCIES AND WAVELENGTHS

Corrected in accordance with the latest official information available at the time of going to press.

kc/s	m.	kW	Station
			Band No. 1. 150-300 kc/s.
153	1961	5	Ankara (Turkey)
		7	Kaunas (Lithuania)
160	1875	100	Hilversum (No. 1) (*Holland*) (*Transmits K.R.O. and N.C.R.V. Programmes*) (*Power 10 kW only until 3.40 p.m. G.M.T.*)
		150	Radio-Romania. (Romania)
165	1807	150	Lahti (Finland)
172	1744	500	Moscow (No. 1) (U.S.S.R.)
182	1648	80	Radio-Paris (France)
185	1622	5	Istanbul (Turkey)
187.5	1600	20	Irkoutsk (U.S.S.R.)
191	1571	60	Deutschlandsender (Germany)
200	1500	150	DROITWICH
203	1442	35	Minsk (U.S.S.R.)
		16	Reykjavik (Iceland)
216	1389	150	Motala (Sweden)
217.5	1379	100	Novosibirsk (U.S.S.R.)
224	1339	120	Warsaw (No. 1) (Poland)
232	1293	150	Luxembourg
		100	Leningrad (No. 1) (U.S.S.R.)
240	1250	60	Kalundborg (Denmark)
		0.5	Vienna Experimental (Austria)
253	1185.8	10	Aalesund (Norway)
256.4	1170	25	Tashkent (U.S.S.R.)
260	1153.8	60	Oslo (Norway)
271	1107	100	Moscow (No. 2) (U.S.S.R.)
282	1063.8	10	Tromsö (Norway)
283	1060	35	Tiflis (U.S.S.R.)
			Band No. 2. 300-500 kc/s.
340	882.3	10	Saratov (U.S.S.R.)
347	864.6	10	Finmark (Norway)
355	845.1	20	Rostov-on-Don (U.S.S.R.)
359.5	834.5	18	Budapest (No. 2) (Hungary)
375	800	40	Sverdlovdsk (U.S.S.R.)
392	765	0.6	Boden (Sweden)
		30	Banská-Bystrica (Czecho.) (*Power 15 kW after 5 p.m. G.M.T.*)
401	748	1.3	Genéva (Switzerland)
		100	Moscow (No. 3) (U.S.S.R.)
413.5	726	0.6	Östersund (Sweden)
		10	Voronezh (U.S.S.R.)
431	695	1.2	Oulu (Uleaborg) (Finland)
			Band No. 3. 500-1,500 kc/s.
519	578	1	Innsbruck (Austria)
		0.7	Hamar (Norway)
522	575	0.5	Tartu (Estonia)
527	569.3	6.3	Ljubljana (Yugoslavia)
		10	Viipuri (Finland)
536	559.7	10	Bolzano (Italy)
		16	Wilno (Poland)
546	549.5	120	Budapest (No. 1) (Hungary)
556	539.6	100	Beromünster (Switzerland)
565	531	60	Athlone (Irish Free State)
		10	Klaipeda (Lithuania)
		3	Palermo (Italy)
574	522.6	100	Stuttgart (Germany)
583	514.6	50	Madona (Latvia)
		15	Alpes-Grenobles (PTT)(France)
586	512	10	Archangel (U.S.S.R.)
592	506.8	100	Vienna (Austria)
601	499.2	25	Rabat (Morocco)
		10	Sundsvall (Sweden)
610	491.8	20	Florence (Italy)
620	483.9	15	Brussels (No. 1) (Belgium)
		20	Cairo (No. 1) (Egypt)
629	476.9	20	Trondelag (Norway)
		15	Lisboa (Emissora Nacional) (Portugal)
638	470.2	120	Prague (No. 1) (Czechoslovakia) *Temp'ly on 5 kW only*
648	463	100	Lyons (PTT) (France)
		10	Petrozavodsk (U.S.S.R.)
658	455.9	100	Cologne (Germany)
668	449.1	70	NORTH REGIONAL
677	443.1	100	Sottens (Switzerland)
686	437.3	2.5	Belgrade (Yugoslavia)
		0.5	Bodö (Norway)
695	431.7	120	Paris (PTT) (France)
704	426.1	55	Stockholm (Sweden)
713	420.8	50	Rome (No. 1) (Italy)
722	415.4	35	Kiev (U.S.S.R.)
		10	Kharkov (No. 1) (U.S.S.R.)
731	410.4	3	Madrid (EAJ2) (Spain)
		5.5	Seville (Spain)
731	410.4	...	Assiut (Egypt)
		20	Tallinn (Estonia)
740	405.4	100	Munich (Germany)
749	400.5	90	Marseilles (PTT) (France)
		1	Pori (Finland)
		0.25	Sortavala (Finland)
758	395.8	12	Katowice (Poland)
767	391.1	60	BURGHEAD
		70	SCOTTISH REGIONAL
776	386.6	10	Stalino (U.S.S.R.)
		120	Toulouse (PTT) (France)
		1	Fredrikstad (Norway)
785	382.2	120	Leipzig (Germany)
795	377.4	7.5	Barcelona (EAJ1) (Spain)
		50	Lwów (Poland)
804	373.1	70	WEST REGIONAL
814	368.6	50	Milan (No. 1) (Italy)
823	364.5	12	Bucharest (Romania)
832	360.6	100	Moscow (No. 4) (U.S.S.R.)
		0.5	Agen (France)
841	356.7	100	Berlin (Germany)
850	352.9	1	Bergen (Norway)
		1	Porsgrund (Norway)
		1	Sofia (Bulgaria)
		3	Valencia (Spain)
859	349.2	10	Simferopol (U.S.S.R.)
		100	Strasbourg (France)
868	345.6	16	Poznań (Poland)
877	342.1	70	LONDON REGIONAL
886	338.6	15	Linz (Austria)
		7.5	Graz (Austria)
895	335.2	10	Helsinki (Finland)
		1.5	Limoges (PTT) (France)
904	331.9	100	Hamburg (Germany)
913	328.6	10	Dniepropetrovsk (U.S.S.R.)
		60	Toulouse (Radio - Toulouse) (France)
922	325.4	32	Brno (Czechoslovakia)
932	321.9	15	Brussels (No. 2) (Belgium)
941	318.8	12	Algiers (North Africa)
		10	Göteborg (Sweden)
950	315.8	100	Breslau (Germany)
959	312.8	60	Poste Parisien (France)
968	309.9	30	Bordeaux-Sud-Ouest (France)
		10	Odessa (U.S.S.R.)
977	307.1	100	NORTHERN IRELAND REGIONAL
979	306.4	0.4	Rueil-Malmaison (Beziers) (France)
985	304.3	10	Genoa (Italy)
		24	Torun (Poland)
995	301.5	60	Hilversum (No. 2) (Holland) (*Transmits A.V.R.O., V.A.R.A. and V.P.R.O. Programmes*) (*15 kW only until 3.40 p.m. G.M.T.*)
1004	298.8	13.5	Bratislava (Czechoslovakia)
1013	296.2	70	MIDLAND REGIONAL
		5	Chernigov (U.S.S.R.)
1022	293.5	3	Barcelona (EAJ15) (Spain)
		2	Cracow (Poland)
		0.7	Oviedo (Spain)
1031	291	100	Königsberg (No. 1) (Heilsberg) (Germany)
		5	Parede (Portugal)
1040	288.5	10	Leningrad (No. 2) (U.S.S.R.)
		120	Rennes-Bretagne (France)
1050	285.7	50	SCOTTISH NATIONAL
1059	283.3	20	Bari (No. 1) (Italy)
1068	280.9	0.8	Radio-Cité (Paris) (France)
		4	Tiraspol (U.S.S.R.)
1077	278.6	12	Bordeaux-Lafayette (France)
1086	276.2	2	Falun (Sweden)
		0.7	Zagreb (Yugoslavia)
1095	274	5	Madrid (EAJ7) (Spain)
		10	Vinnitsa (U.S.S.R.)
1104	271.7	1.5	Naples (Italy)
		50	Kuldiga (Latvia)
1113	269.5	11.2	Moravská - Ostrava (Czechoslovakia)
		10	Radio - Normandie (Fécamp) (France)
1122	267.4	1	NEWCASTLE
		6.25	Nyireghyháza (Hungary)
		0.25	Alexandria (No. 1) (Egypt)
1131	265.3	10	Hörby (Sweden)
1140	263.2	7	Turin (No. 1) (Italy)
		10	Trieste (Italy)
1149	261.1	20	LONDON NATIONAL
		20	NORTH NATIONAL
		20	WEST NATIONAL
1158	259.1	10	Kosice (Czechoslovakia)
1167	257.1	15	Monte Ceneri (Switzerland)
1176	255.1	10	Copenhagen (Denmark)
1185	253.2	10	Kharkov (No. 2) (U.S.S.R.)
		60	Nice-Corse (France)
1195	251	0.5	Cassel (Germany)
		2	Coblenz (Germany)
		25	Frankfurt (Germany)
		5	Freiburg-im-Breisgau(Germany)
		2	Trier (Germany)
1204	249.2	5	Prague (No. 2)(Czechoslovakia) *Temp'ly suspended*
1213	247.3	60	Lille(Radio PTT Nord)(France)
1222	245.5	50	Radio - Marconi (Bologna) (Italy)
		0.3	Narvik (Norway)
1231	243.7	5	Gleiwitz (Germany)
1240	241.9	1	Cork (Irish Free State)
1249	240.2	17	Saarbrücken (Germany)
1258	238.5	10	Riga (Latvia)
		1	Rome (No. 3) (Italy)
		1	San Sebastian EAJ8 (Spain)
1267	236.8	2	Nürnberg (Germany)
1276	235.1	27	Radio Côte d'Azur (France)
		0.5	Christiansand (Norway)
		0.5	Stavanger (Norway)
1285	233.5	1	ABERDEEN
		0.25	Dresden (Germany)
1294	231.8	5	Klagenfurt (Austria)
		5	Vorarlberg (Austria)
1303	230.2	0.5	Danzig (Danzig Free City)
1312	228.7	0.25	Karlstad (Sweden)
		2.5	Malmö (Sweden)
		0.25	Norrköping (Sweden)
		0.25	Trollhättan (Sweden)
1321	227.1	1.25	Magyaróvar (Hungary)
1330	225.6	2	Bremen (Germany)
		2	Hanover (Germany)
		2	Kiel (Germany)
		2	Stettin (Germany)
1339	224	1.2	Montpelier (PTT) (France)
		2	Lódz (Poland)
1348	222.6	0.5	Dublin (Irish Free State)
		0.15	Rjukan (Norway)
		2	Salzburg (Austria)
		0.7	Tampere (Finland)
		0.5	Cairo (No. 2) (Egypt)
		2	Königsberg (No. 2) (Germany)
1357	221.1	0.15	Notodden (Norway)
		4	Milan (No. 2) (Italy)
		0.2	Turin (No. 2) (Italy)
		2	Bari (No. 2) (Italy)
1365	219.6	0.7	L'Ile de France (France)
1375	218.2	0.5	Basle (Switzerland)
		0.5	Berne (Switzerland)
1384	216.8	2	Warsaw (No. 2) (Poland)
1393	215.4	25	Radio-Lyons (France)
1402	214	2	Stara-Zagora (Bulgaria)
1420	211.3	0.5	Vaasa-Vasa (Finland)
1429	209.9	0.5	Alexandria (No. 2) (Egypt)
		0.5	Kaiserslautern (Germany)
		0.5	Turku (Finland)
1438	208.6	1.25	Miskolc (Hungary)
1456	206	5	Eiffel Tower (Paris) (France)
1465	204.8	1.25	Pecs (Hungary)
		0.1	Antwerp (Belgium)
		0.1	Courtrai (Belgium)
1474	203.5	1	BOURNEMOUTH
		0.3	PLYMOUTH
1487	201.7	0.1	Binche (Belgium)
1492	201.1	0.1	Chatelineau (Belgium)
		0.1	Wallonia (Belgium)
		0.7	Nimes (France)
		0.2	Albacete (Spain)
		0.5	Santiago (Spain)
1500	200	0.1	Liége Experimental, Radio-Cointe (Belgium)
		0.1	Wallonia, Seraing, Verviers (Belgium)
		0.25	Pietersaari (Jacobstadt) (Finland)
		0.2	Radio-Alcala (Spain)
1530	196	0.2	Karlskrona (Sweden)
1737	173	0.1	Liepajá (Latvia)

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